

THE COST OF PACKING AND DISTRIBUTION OF FLORIDA HONEY

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CHAPTER I

INTRODUCTION

Importance of the Honey Industry in Florida

Because of its semitropical climate and long-growing season, Florida is especially endowed with many nectar-producing plants and flowers, the source of honey production. In 1959, this State ranked fourth in total volume of honey produced in the United States. During recent years, total honey production has varied from 13,090,000 pounds in 1955 to as high as 18,936,000 pounds in 1957, dropping to 14,958,000 pounds in 1959. Farm value of the Florida honey crop varied from \$2,395,000 in 1955 to \$3,579,000 in 1957, but dropped to \$2,373,000 in 1959.¹

There were approximately 100 full-time commercial beekeepers in the State employing 200 to 300 people in 1955 and 1956. There were also about 500 more who produced honey as a part-time occupation and sold it commercially. In 1956 apiaries numbered about 8,000, comprising 248,000 colonies of bees. The number of bee colonies in 1959 was reported as 277,000.²

During 1955 and 1956, the period covered by this study, there were twenty commercial packers of honey in the State. Nine independent packers and one cooperative packer supplied data for the analysis.

¹U. S. Department of Agriculture, Agricultural Marketing Service Reports, Florida Honey Reports, Data for 1939-1958.

²Ibid.

The smallest packer sold an average of 42,745 pounds and the largest sold an average of 803,424 pounds annually for the two-year period.

Trends in Production of Honey and Citrus

Citrus is the largest and most important single source of nectar for honey production in Florida. The rising trend in citrus production is indirectly aiding an increase in honey from that source.

The production trends in citrus and honey in Florida during the 20-year period from 1939 to 1958 is shown in Table 1. These same data are graphically illustrated in Figure 1, in which a trend-line has been fitted to illustrate a 6.8 per cent average annual increase in citrus and an 8.5 per cent average annual increase in honey production for that period.

Honey production fluctuated greatly from year to year due principally to weather conditions. It should be noted that war years were abnormal and serious freezes damaged the citrus crop of 1957-58 after the citrus blossomed and bees had collected the nectar.

The available data from the USDA do not present a breakdown of the volumes of various kinds of honey produced in Florida. However, on the basis of the collections of honey by the Florida Honey Cooperative at Umatilla from many beekeepers in 1955 and 1956, it is reasonable to assume that approximately 50 per cent of the honey produced by members was of the citrus variety, which is classified as Orange Blossom. The combined two-year production by Co-op members amounted to 682,396 pounds of Orange Blossom and 658,199 pounds of mixed flowers (classified as Light Amber in this study). The ratio of boxes of

Table 1.--Comparison of production trends in citrus and honey and changes in the number of bee colonies in Florida

Citrus		All honey		Ratio: boxes citrus to 1-lb Orange Blossom honey ^a	Colonies of bees (1000's)	Ratio: boxes citrus to one bee colony
Season	Production (1000's boxes)	Year	Production (1000's lbs)			
1939-40	43,995	1939	5,760	15.3	144	306
1940-41	55,980	1940	6,750	16.6	150	373
1941-42	48,650	1941	7,738	12.6	146	333
1942-43	68,875	1942	8,250	16.7	150	459
1943-44	80,990	1943	8,586	18.9	162	500
1944-45	69,350	1944	10,324	13.4	178	390
1945-46	86,200	1945	9,100	18.9	182	474
1946-47	87,570	1946	15,280	11.5	191	458
1947-48	95,570	1947	8,190	23.3	195	490
1948-49	93,100	1948	8,159	22.8	199	468
1949-50	87,960	1949	11,340	15.5	189	465
1950-51	105,580	1950	16,224	13.0	208	508
1951-52	119,360	1951	17,876	13.4	218	547
1952-53	109,920	1952	17,025	12.9	227	484
1953-54	138,670	1953	18,088	15.3	238	583
1954-55	128,680	1954	17,612	14.6	238	541
1955-56	134,400	1955	13,090	20.5	238	565
1956-57	135,600	1956	17,360	15.7	248	548
1957-58	116,400	1957	18,936	12.3	263	442
1958-59	126,200	1958	15,618	16.1	274	461

^aUnited States Department of Agriculture, Agricultural Marketing Service Reports, Florida Honey Reports, Data for 1939-1958.

Florida State Marketing Bureau, Annual Agricultural Statistical Summary, November, 1959.

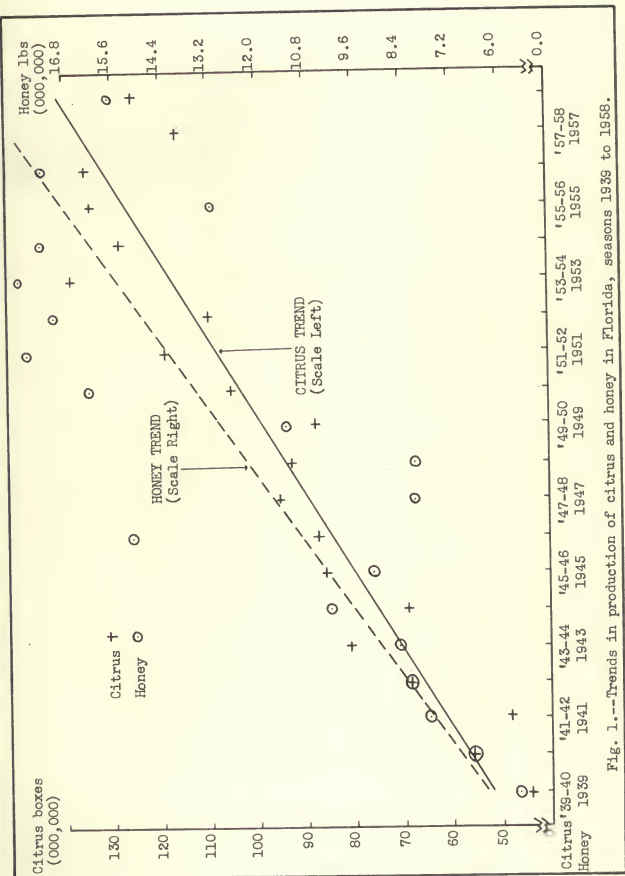


Fig. 1.--Trends in production of citrus and honey in Florida, seasons 1939 to 1958.

citrus to one pound of Orange Blossom honey in Column 5 of Table 1 is calculated on this assumption.

A comparison of recent trends in citrus and honey was made on the basis of the average production of 4 years beginning with the 1945-46 season, and the average of the last 4 years for which data were available (1955 to 1958). It was found that between the 2 periods citrus increased 41.4 per cent and honey 59.6 per cent. The ratio of boxes of citrus to one pound of Orange Blossom Honey, decreased 15.7 per cent, from an average of 19.1 to 16.1. The average ratio of Orange Blossom Honey to citrus for the total period covered by Table 1, was one pound of honey for each 15.4 boxes of citrus.

Between the same 2 periods discussed above, the average number of colonies worked by beekeepers in the State increased 33.4 per cent, the ratio of boxes of citrus to bee colonies increased 6.6 per cent from an average of 473 to 504. These data indicate that beekeepers have a potential nectar source in the citrus belt of the State for increased production of honey. In assessing these values it is important to note that approximately 50 per cent of all bee colonies in Florida were located in the citrus groves during the citrus blooming seasons. In addition, 15 to 20 thousand bee colonies were shipped into the groves from out of state during those times. Also, in the past beekeepers have not followed the bee-hive spacing in the citrus groves that was advocated by the state extension agriculturists.

It is evident that a further opportunity for expansion in honey production exists as a result of the great strides being made in citrus production. With proper weather conditions, with more bee colonies to

work the groves and with more efficient placement of bee colonies among them, the possibilities for future increases in Orange Blossom honey production are very favorable.

Objectives and Scope of Study

Objectives

The objectives of this study were to determine: (1) costs and factors affecting costs of packing honey in various sizes and types of containers, and provide a basis for packers to compare their packing costs with an industry average, (2) methods and policies of selling honey, (3) market outlets and areas of distribution, (4) seasonal distribution or flow of honey to market over time, (5) principal shipping methods and costs of transportation, (6) average f.o.b. prices received by packers for various packs, and (7) weaknesses in the present marketing system and some possible solutions.

Scope

The study areas include the principal marketing phases of the honey-packing industry--handling, processing, packing, distributing--and the costs of these functions from the time honey is delivered to the packing plant by the beekeeper to its delivery in packed form to the various market outlets.

Method of Study

Planning study

This is the first economic analysis made on the costs of packing, and distribution of Florida-produced honey.³ In planning the study, several field trips were made to become acquainted with packers, to observe the physical operation of plants and to explain to the packers the nature of the study to be undertaken. It was learned that most of the packing plants operated with very little machinery. Information was obtained on honey industry terminology, various types of honey packed, container sizes and types in current use, and location of plants.

Sampling procedure

The original plan called for gathering packout data from the 1955 and 1956 production records of twenty commercial honey packers in all areas of the State. Expense data were to be obtained from the bookkeeping records of the firms. However, since some packers had ceased packing operations and others did not have available data, the sample of houses studied was reduced to ten. The Florida Honey Cooperative at Umatilla could furnish data only for 1956. For comparative purposes, figures for both years were needed, therefore the data from the cooperative were not used.

³At the time this study was undertaken in 1956, there were no published data on sales distribution or packing costs for the Florida honey-packing industry.

Estimates of honey production are published annually by the United States Department of Agriculture. Current honey prices paid producers by packers or other handlers are published in the Semi-monthly Honey Market News Report by the United States Department of Agriculture, Agricultural Marketing Service, when they are available from handlers.

Of the nine firms whose figures were used, only one kept inventory records of packout operations. Therefore, in order to obtain the necessary packout information for packing-cost analysis, it was decided that packout would be determined from sales invoices for the eight other firms. In the honey-packing industry, sales and packing are based on incoming orders of specific items from customers in the various market areas. Therefore, sales data are a good measure of firm packout.

The expense data for materials, labor and all other costs of operating plants were obtained from records furnished, or quoted, by the packinghouse operators.

To obtain necessary distribution data, the original plan was to sample every third invoice of the twenty commercial packers.

Since the number of cooperating firms was reduced to ten, it was decided that a 100 per cent sample should be taken of all available invoices with the exception of Firm D. This firm was a complex of many enterprises in addition to its honey-packing operation. Since its sales invoices were too numerous and included many other items as well as honey, only the sales to its largest customers of honey were used. These data were obtained for the same customers for both years, 1955 and 1956.

None of the principal Tupelo-honey handlers were included in the final sample of nine firms. These nine were all located within the large citrus-producing section of the State. They were in the area bounded on the north at a latitude approximating Ocala and on the south at a latitude passing through Fort Myers. Some of these had access to

small quantities of Tupelo which were incorporated in the study within that type. The locations of the firms in the sample are shown in Figure 2.

Analysis of data

Copies were made of 6,760 sales invoices, from the nine cooperating firms, for 1955 and 1956. These invoices showed sales data for 15,687 different lots of honey. A copy of the data-collecting form is included in Appendix 2. The data form was used to calculate and apportion discount and brokerage fees for each lot of honey sold. The shipping costs were allocated on a gross weight basis, and the f.o.b. net return to the packer for each lot of honey sold was calculated. Each lot was a shipment of a specific size and type container of one specific type of honey.

Shipping costs for those firms which used their own trucks for delivering honey were derived from truck and driving-labor costs supplied by the firms. The total cost of making each delivery stop was calculated on the basis of the total number of gross pounds delivered per invoice and the number of miles to each delivery stop from the plant. The total cost of each delivery stop was allocated among the lots comprising each delivery, on the basis of each lot's individual gross weight

After all calculations were completed on the invoice-data forms, all pertinent data were punched on IBM cards. These cards in turn were used to obtain totals to prepare the various tables in this study and the pack-out volumes for the section on cost of packing (see Appendix 2 for IBM data form).



Fig. 2.--Location of 9 Florida honey-packing plants studied.

The cost of packing each size and type of container was derived from the packout volumes and from the various cost data supplied by each firm. The packing costs for each firm were calculated individually as an initial step, and then, weighted averages for the industry were derived separately for the group of packers which filtered and those that did not filter honey.

Definitions and Abbreviations

Since this is the first economic study of the honey industry of Florida, the writer feels it advisable to review and define the numerous common terms used in the industry. The definitions include many terms that are also used in marketing other agricultural products, and which apply equally well to the marketing of honey.

Terminology

Comb honey.--The consumer pack which contains a chunk or chunks of comb honey literally floating in liquid honey.

Crystallization.--The natural process by which the sugars in honey crystallize or granulate around a nucleus made up of impurities, such as pollen, which get into the honey during the production process. Another term used to describe this process is granulation.

Filtered honey.--Honey which has been mixed with a diatomaceous earth (filter-aid or fuller's earth), heated to approximately 140 degrees Fahrenheit and pumped under pressure through a filter-press or some other filtering device.

Hand packing.--The most common method of packing used by the packing firms studied. All handling and movement of containers is performed manually.

Honey type and quality.--No true standards for quality or variety of honey (except for Tupelo) have been set by law for honey packers to follow (see definitions of honey types, p. 13). Thus, if a packer labels and sells his honey as Orange Blossom, it is so reported in this study; Choice Mixed Flowers is reported as

Light Amber; baker's honey, or Mixed Flowers is reported as Amber or Light Amber, depending on the description in the sales invoice.

Further, in respect to quality, it was beyond the scope of this study to determine quality in regard to color or moisture content. Therefore, the categories of honey type referred to in this work are Tupelo, Orange Blossom, Light Amber, Amber, Dark Amber, Orange Blossom plus (+) Blossom, Orange Blossom Spread, Orange Blossom Comb, Light Amber Comb, and Tupelo Comb.

Item.--One specific size and type container holding a specific kind of honey. Filtering is no consideration. Separating the filtered and unfiltered honey approximately doubles the number of items covered by this study. In 1955, the nine firms studied sold 88 consumer-size items and 13 bulk size. In 1956, there were 79 consumer-size and 12 bulk-size items sold.

Jobbing.--When a honey packer or an employee drives the firm's truck on a planned route, and stops to sell directly to customers on the way, the term "jobbing" is used by some members of the industry.

Jobbing route.--The planned route followed when a packing firm's truck driver carries out the jobbing function defined above.

Skep.--A beehive woven out of twisted straw.

Strained honey.--That which has been strained through a fine 80-mesh cloth.

Table grade.--Honey which is suitable for table use in the home as distinct from honey which is generally used in baked goods.

Types of honey sold

Many varieties of honey are produced in Florida. The principal kinds are Orange Blossom, Tupelo, Saw Palmetto, Gallberry, Titi, Mangrove, Partridge Pea, Sunflower, Cabbage Palm, Spanish Needle, Goldenrod, Sweet Clover, Mango and Thistle.

However, only Orange Blossom and Tupelo are packed under their respective names for distribution into consumer channels. The others are sold as blends or under trade names. In bulk, at the wholesale level, they are sold under various descriptions as Florida Flowers

(Light Amber or Amber), Choice Mixed Flowers (Light Amber), Mixed Flowers (Amber or Dark Amber), depending on the quality and color of the honey.

The writer has used the color standards suggested by the United States Department of Agriculture to identify the individual packer's types or mixtures of blended honey under one common term (Figure 3).

Following is a list of abbreviations and the floral source of the various kinds of honey sold by the nine packers studied:

A -- Amber.--Having amber color and made up of mixed flowers. It is usually sold to the bakery trade. Some is sold for home use under private brand names.

Clv -- Clover.--Gathered from clover blossoms.

DA -- Dark Amber.--Dark amber in color and used in baked goods. It is of a lower quality than Amber, above.

LA -- Light Amber.--A mixture of choice types from Florida flowers, such as Gallberry, Saw Palmetto, and/or other wild flowers, which combined, result in a high-grade table honey. It has an excellent flavor, is light amber or lighter in color, and is sold under various brand names.

LAC -- Light Amber Comb.--Packed in the same manner as Orange Blossom Comb except that it is from light color choice-mixed types.

OB -- Orange Blossom.--Includes honey from all citrus species. The color is usually extra light amber or lighter.

OBC -- Orange Blossom Comb.--A large chunk of comb honey covered with liquid Orange Blossom honey in consumer-size containers. Approximately two-thirds, by weight, is comb and one-third, by weight, is liquid honey. Comb packs prepared in this manner are also referred to as "Cut Comb Honey in Extracted Honey." In the US grade they are called "Chunk Comb Honey" or "Chunk Honey."

OB&Blo -- Orange Blossom with Blossom.--Orange Blossom honey with an imitation wax orange blossom suspended in it. It has been a popular gift item.

OBSp -- Orange Blossom Honey Spread.--A honey product prepared by creaming granulated Orange Blossom honey.

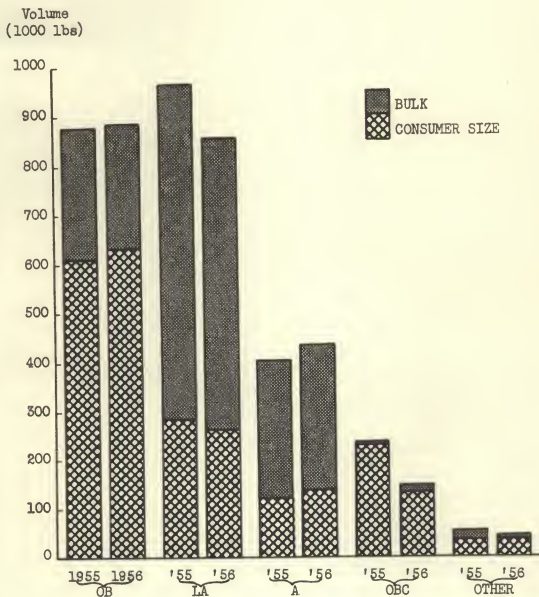


Fig. 3.--Variation in volume of all honey sold by type of pack and varieties, 9 packers, 1955 and 1956.

Tu -- Tupelo.---A very distinctive table-type honey from the tupelo gum tree. It has extra light amber or lighter color, contains a much higher percentage of levulose than other types, and commands the highest price among the Florida honeys.

Container sizes, container types, and shipping units

Honey is packed as a semiliquid. Frequently it is sold to consumers in pint, quart, and gallon containers on the basis of liquid capacity. However, commercially, the unit of measurement for honey is the pound (16 ounces avoirdupois), regardless of the liquid capacity of its container.

The following list describes the most important shipping units for various honey containers and gives the designation or abbreviation used. The shipping unit for consumer sizes is the familiar corrugated cardboard box (or case) holding various numbers of jars, jugs, tins, or other types of small containers. Some containers are used only for comb honey, others are used for packing both liquid and comb honey. Bulk honey is shipped in one-gallon jars or jugs, five-gallon cans, and 55-gallon steel drums. Some bulk comb honey is shipped in beehive supers.

Most important containers for consumer sizes

24/8-oz Q -- A case of 24, 8-ounce oval glass jars referred to in the industry as queenline or beeline jars.

12/1-lb Sv -- A case of 12, 1-pound table servers. The jars have plastic tops with no-drip spouts. A metal spring and slide on the top releases the honey when withdrawn.

24/1-lb Q -- A case of 24, 1-pound oval, glass jars referred to as queenline or beeline jars in the industry.

24/1-lb FB -- A case of 24, 1-pound glass, globe-shaped jars called fishbowls.

24/1-lb Tumb -- A case of 24, 1-pound glass tumbler-shaped jars.
Principal use is for comb honey.

12/2-lb Q -- A case of 12, 2-pound oval, glass jars called queenline or beeline jars.

12/2-1/2-lb Sq -- A case of 12, 2-1/2-pound glass, square refrigerator jars. Principal use is for comb honey.

24/2-1/2-lb Tin -- A case of 24, 2-1/2-pound round tin cans with lids, referred to as tins.

12/4-1/2-lb LTin -- A case of 12, 4-1/2-pound lithographed tin cans with lids.

6/5-lb RJ -- A case of six, 5-pound round, glass economy jars.

6/5-lb Tin -- A case of six, 5-pound tin cans with lids.

12/5-lb Tin -- A case of 12, 5-pound tins with lids.

Most important containers for bulk sizes

1/60-lb Can -- A 5-gallon square tin can with a capacity of 60 pounds of honey.

1/650-lb Drum -- A 55-gallon metal drum with a capacity of approximately 650 pounds of honey. Weights vary due to differences in density of honey.

Other containers used -- See Appendix 1.

CHAPTER II

CHARACTERISTICS OF NINE FLORIDA HONEY PACKING PLANTS

Type of Business Organization

The production and marketing of honey in Florida is unique in a number of ways. Unlike many other agricultural crops produced, more than half of the honey handled (packed and processed) in 1955 and 1956 by the nine firms was sold to wholesale and retail outlets within the State.

Five of the nine packing firms studied had a vertically integrated system of production and marketing. They produced honey, packed it and made deliveries with their own trucks directly to wholesale and retail outlets in Florida. Three packers produced some honey, and purchased additional quantities from beekeepers in order to supply their wholesale and retail customers. The remaining one limited his operation to processing and packing, and bought all raw honey from beekeepers.

Full mechanization of packing honey, similar to that used in canning and bottling of other food products, had not been accomplished in Florida, to the knowledge of the writer, at the time of this study. Two plants had semiautomatic filling (or bottling) machines. The labeling, capping, and casing was completed by hand. In the seven other plants, all bottling operations were done manually. Processing and

filtering was, of necessity, a mechanical operation and is described in detail in the chapter on Cost of Packing.

Development after World War II and Packer's Prior Business Backgrounds

Honey production in Florida, in 1945, was reported by the USDA at approximately nine million pounds. By 1957, production had more than doubled and amounted to approximately nineteen million pounds.¹ With this great expansion in production, the number of firms entering the honey-packing industry increased proportionately. Five of the nine firms under discussion were established after 1945.

The operators of the honey-packing plants had varied backgrounds (and represented a broad cross section of our citizenry). Four were commercial beekeepers before they became packers. Three were in the citrus, cattle, and poultry business, and started with a few beehives for the grove or farm. Two came from professional fields--chemistry and engineering. They started as bee hobbyists and expanded into packing honey as a full-time enterprise. Each, in his own way, developed the opportunities presented by our free-enterprise system within the great agricultural and economic expansion of the State.

Processing Methods Used

One of the most important differences of the packing plants studied was the method of processing. The quality and appearance of the final product shipped into wholesale and retail channels depended on the method used and the care with which it was done.

¹U. S. Department of Agriculture, Agricultural Marketing Service Reports, Florida Honey Reports, Data for 1939-1958.

The preparation of honey for consumer use does not require a complex or elaborate system of machinery. Basically, it is a cleaning process. Under sanitary methods of extracting honey from the comb, it is ready for eating as it comes from the centrifugal extractor in the beekeeper's honey house. However, due to the nature of the business, sanitary conditions are difficult to control. Therefore, further processing is the rule rather than the exception. It has been the experience of some packers, that consumers will buy a crystal clear honey in preference to one which may be slightly clouded. This clarity can be obtained by filtering.

A few packers, however, were of the opinion that honey should remain in its natural state and they did not advocate any processing which might affect its flavor or color.

The slight cloudiness of honey as it comes from the extractor is due to microscopic impurities, including pollen, which enter it during the gathering of nectar by bees and subsequent handling by the beekeeper. These impurities are the nuclei about which crystallization (sugaring) forms when it is stored. If sugaring occurs in glass jars on a grocer's display shelf, honey loses its eye-appeal to consumers; some people mistakenly believe that it is spoiled and will not buy it for that reason. These require replacement with freshly packed jars if a grocer wishes to retain them in his product line.

There are three principal processing methods for removing impurities and debris from honey--filtering, straining, settling. Pasturization is a common feature of the two methods described, and which were the ones used by the packers studied.

The filtering process

The first method, which has grown in popularity, is filtering. In this process honey is mixed with a diatomaceous earth called filter-aid. It is heated to 130° - 140° F., pumped through a filter press under pressure, and then cooled as quickly as possible in settling tanks or by refrigeration. By this method even the smallest impurities are removed and the resulting product is crystal clear. It takes on a shining or glowing effect, and its keeping qualities against sugaring are greatly improved by removal of most of the microscopic particles which could induce crystallization. Filtered honey remains in this clear state for long periods of time. Heat has a tendency to darken it; therefore, extreme care is taken to limit the temperature to 140° F. The process changes the flavor to a very slight degree, but this is more than offset by the advantage in the removal of flower pollen which causes allergic reactions in some people. Cleaning it in this way eliminates the danger of reactions in those people susceptible to the pollen allergies.

The straining process

The second method involves a similar procedure of heating honey to 130° - 140° F. However, instead of filtering it through a filter press, the honey is strained through 80-mesh cotton cloth to remove debris and other impurities. It is then permitted to cool in large settling tanks. Some packers do their bottling while it is still hot, the theory being that honey bottled while hot will not sugar. In this method, microscopic impurities, including pollen, remain therein since

the cloth is not fine enough to strain them out. However, the resulting product makes an attractive pack.

Volumes of Honey Sold, and FOB Returns to Packers

The selling methods of the honey packers studied were many and varied. Therefore, in order to compare various relationships in the tables of this study, the dollar values for returns to packers were determined on an f.o.b. basis. The f.o.b. net returns were calculated for all lots of honey sold by deducting brokers' commissions, customers' discounts and transportation charges where these costs applied.

The total volume of honey sold by the nine firms in 1955, was 2,531,727 pounds, with a net return to packers of \$428,046 (Table 2). In 1956, volume amounted to 2,364,854 pounds, a decrease of 6.6 per cent from the previous year. Net returns were \$425,233, or 0.7 per cent less in dollar value than in 1955 (Table 2).

Consumer size packs averaged 51 per cent by volume of all honey sold in the 2 years studied. However, the f.o.b. returns for these packs were 63 per cent of total sales.

Filtered honey (in bulk- and consumer-size packs) amounted to 61.8 per cent of the total volume sold in 1955 by 9 firms and 43.0 per cent in 1956. The volume of filtered honey in 1956 decreased 34.9 per cent from the previous year. The largest part of this decrease was due to a reduction in sales of 367,887 pounds of bulk. In addition consumer-size packs of filtered honey decreased 180,807 pounds.

Table 2.--Volume and value of all honey sold by pack size and method of processing, 9 packers, 1955 and 1956

Pack sizes and process	Amount		Per cent of total		Per cent change 1955-1956
	1955	1956	1955	1956	
<u>Consumer sizes</u>					
	<u>Volume sold - lbs</u>				
Filtered	1,080,990	904,183	42.8	38.2	-16.4
Unfiltered	203,909	310,161	8.0	13.1	+52.1
Total	<u>1,284,899</u>	<u>1,214,344</u>	<u>50.8</u>	<u>51.3</u>	<u>- 5.5</u>
<u>Bulk sizes</u>					
Filtered	480,186	112,299	19.0	4.8	-76.6
Unfiltered	766,642	1,038,211	30.2	43.9	+35.4
Total	<u>1,246,828</u>	<u>1,150,510</u>	<u>49.2</u>	<u>48.7</u>	<u>- 7.7</u>
All honey	2,531,727	2,364,854	100.0	100.0	- 6.6
<u>Consumer sizes</u>					
	<u>Total f.o.b. returns</u>				
Filtered	\$235,554	\$207,526	55.0	48.8	-11.9
Unfiltered	36,017	59,284	8.4	13.9	+64.6
Total	<u>\$271,571</u>	<u>\$266,810</u>	<u>63.4</u>	<u>62.7</u>	<u>- 1.8</u>
<u>Bulk sizes</u>					
Filtered	\$ 61,917	\$ 17,270	14.5	4.1	-72.1
Unfiltered	94,558	141,153	22.1	33.2	+49.3
Total	<u>\$156,475</u>	<u>\$158,423</u>	<u>36.6</u>	<u>37.3</u>	<u>+ 1.2</u>
All honey	\$428,046	\$425,233	100.0	100.0	- 0.7

Importance of various types of honey

Within the filtered group of consumer sizes, Orange Blossom honey, in plain and comb packs combined, was first in importance of volume sold. It was 70.5 per cent of the group in 1955 and 67.4 per cent in 1956 (Table 3). Orange Blossom, plain and comb combined, was also first in volume in the unfiltered group of consumer packs--39.5 per cent in 1955 and 51.8 per cent in 1956.

Light Amber honey accounted for the second largest volume of filtered consumer sizes in both years studied, but was third in volume importance in the group of unfiltered consumer-size packs. Second in importance in the unfiltered consumer group was Amber honey with 31.3 per cent of the group in 1955 and 31.8 per cent in 1956.

Within the group of bulk sizes of filtered honey, Light Amber was sold in the greatest volume--59.2 per cent of the group total in 1955 and 57.8 per cent in 1956. Amber honey was second in importance within the group.

In the unfiltered bulk sales Light Amber was first in importance in both years. Orange Blossom was second in 1955 with 24.6 per cent of the total, but was replaced by Amber in second place in 1956 with 26.0 per cent of sales.

The f.o.b. value of honey sold by the 9 firms, by type of honey and method of processing (filtered and unfiltered), is shown in Table 4.

A comparison was made of the total volumes of the various types of honey sold to determine the percentage of filtered versus unfiltered in each variety (Table 5).

Table 3.--Volume of honey sold in consumer and bulk sizes by type of honey and method of processing, 9 packers, 1955 and 1956

Process and honey type	Volume sold - lbs				Per cent of total			
	Consumer sizes		Bulk sizes		Consumer sizes		Bulk sizes	
	1955	1956	1955	1956	1955	1956	1955	1956
<u>Filtered</u>								
OB	539,075	482,806	77,663	11,927	49.8	53.4	16.2	10.6
LA	237,196	227,403	284,372	64,949	21.9	25.2	59.2	57.8
A	57,928	41,036	115,132	24,588	5.4	4.5	24.0	21.9
Tu	22,367	2,751	903	120	2.1	.3	.2	.1
OBC	224,046	126,930	2,116	10,815	20.7	14.0	.4	9.6
Other	1,378	23,257	-----	-----	.1	2.6	---	---
Total	1,080,990	904,183	480,186	112,289	100.0	100.0	100.0	100.0
<u>Unfiltered</u>								
OB	72,744	150,634	188,519	239,233	35.6	48.6	24.6	23.0
LA	49,574	40,071	393,578	520,386	24.3	12.9	51.3	50.2
A	63,760	98,600	165,360	268,864	31.3	31.8	21.6	26.0
Tu	3,180	9,145	-----	1,341	1.6	2.9	---	.1
OBC	7,873	9,874	-----	753	3.9	3.2	---	.1
Other	6,778	1,837	19,185	6,634	3.3	.6	2.5	.6
Total	203,909	310,161	766,642	1,038,211	100.0	100.0	100.0	100.0
All honey	1,284,899	1,214,344	1,246,828	1,150,510	---	---	---	---

Table 4.-- FOB value of honey sold in consumer and bulk sizes by type of honey and method of processing, 9 packers, 1955 and 1956

Process and honey type	Volume sold - lbs		Per cent of total	
	Consumer sizes	Bulk sizes	Consumer sizes	Bulk sizes
	1955	1956	1955	1956
Filtered				
OB	\$116,852	\$113,095	\$ 11,276	\$ 2,260
LA	42,480	43,855	36,028	9,251
A	9,397	6,396	14,026	3,186
Tu	5,892	853	159	28
OBC	60,466	36,483	428	2,544
Other	467	6,844	-----	-----
Total	\$235,554	\$207,526	\$ 61,917	\$ 17,270
Unfiltered				
OB	\$ 13,318	\$ 29,805	\$ 25,391	\$ 34,891
LA	9,401	8,381	49,214	72,309
A	9,060	15,507	18,135	32,806
Tu	793	2,377	-----	268
OBC	1,852	2,701	-----	143
Other	1,593	513	-----	736
Total	\$36,017	\$ 59,284	\$ 94,558	\$141,153
All honey	\$271,571	\$266,810	\$156,475	\$158,423
			--	--

Table 5.--Comparison of percentage of volumes of honey sold--filtered versus unfiltered--within each type of honey in 1955 and 1956, 9 packers

Honey type	1955		1956	
	Per cent filtered	Per cent unfiltered	Per cent filtered	Per cent unfiltered
<u>Consumer sizes</u>				
OB	88.1	11.9	76.2	23.8
LA	82.7	17.3	85.0	15.0
A	47.6	52.4	29.4	70.6
Tu	87.6	12.4	23.1	76.9
OBC	96.6	3.4	92.8	7.2
LAC	3.5	96.5	92.4	7.6
OB&Blo	66.2	33.8	66.4	33.6
OBSp	100.0	--	100.0	--
<u>Bulk sizes</u>				
OB	29.2	70.8	4.7	95.3
LA	41.9	58.1	11.1	88.9
A	41.0	59.0	8.3	91.7
DA	--	100.0	--	100.0
Tu	100.0	--	8.2	91.8
Clv	--	100.0	--	100.0

In the consumer sizes, the volumes of filtered exceeded unfiltered by large margins in both years studied with the exception of Amber and Light Amber Comb in 1955, and Amber and Tupelo in 1956. The volume of filtered Orange Blossom honey in consumer packs was 7.4 times the amount of unfiltered in 1955. However, this ratio dropped to 3.2 in 1956. For Light Amber in consumer sizes, the ratio was 4.8 for filtered over unfiltered in 1955, and 5.7 in 1956.

Most of the bulk honey is sold unfiltered to buyers who do their own processing and packing, or to bakers who do not require filtered honey. The percentages illustrate this fact.

Pack sizes used by individual packers

From observations made on field trips and in interviews with individual packers, it was evident that packers had made no effort to standardize the sizes and types of containers, or to reduce the number of various containers used in the industry.

In order to compete with other honey packers and with other food products, such as jellies, marmalades, and syrups, an effort was made by individual packers to find new and different containers to attract the consuming public to their product.

The number of different containers used by nine packers in 1955 and 1956 are listed in Table 6. No attempt was made to differentiate honey varieties within each pack size and type.

Four plants reduced the number of plain packs in the later year and six plants reduced the number of comb packs. The increase in plain packs for Plant C resulted from custom-packing of unusual size tins and one special size of jar. Plant D introduced a large number of new types of containers in order to cater to the novelty and gift trade.

Some items become popular for a few seasons and are discontinued as demand for them ends. A few items are prepared as special custom-packs and may not be repeated in a later season.

The most popular consumer-size container was the 12/5-lb Tin, with total sales of 291,290 pounds in 1955 and 294,325 pounds in 1956 for nine firms. These amounts were 22.7 per cent and 24.3 per cent, respectively, of all honey sold in small packs (Table 7).

Technically, it can be stated that these volumes were increased by the poundage of the 6/5-lb Tin because the only difference is the

Table 6.--Number of various types and sizes of packs used
by 9 packers in 1955 and 1956

Firm	Number of plain packs used			Number of comb packs used		
	1955	1956	Change 1955-1956	1955	1956	Change 1955-1956
A	17	17	---	7	5	- 2
B	21	16	- 5	7	5	- 2
C	8	11	+ 3	2	-	- 2
D	16	26	+10	4	8	+ 4
E	11	11	---	4	3	- 1
F	18	12	- 6	5	5	---
G	7	7	---	1	1	---
H	13	11	- 2	4	3	- 1
I	15	14	- 1	7	3	- 4

size of the shipping unit, the latter being six tins to a case. A factor considered by some packers is the ease of lifting a unit gross weight of 34 pounds versus that of 65 pounds when female workers handle the five-pound tins by the carton.

The second, in importance, was the 24/1-lb Q (ovaline) jar, with sales of 276,589 pounds and 258,117 pounds for the two years under study. Important also was the 12/2-lb Q (ovaline) jar with sales of 102,674 pounds and 90,170 pounds.

In the two-year period, 1955 and 1956, the nine firms used a total of 62 different types of consumer-size containers. Bulk was sold in four types (including supers for comb honey).

In combination with the 10 different varieties of honey packed, the number of individual items sold and recorded for this study amounted to 101 items in 1955, and 91 in 1956.

Table 7.--All honey--most important container sizes and types.
Total volume sold in the United States by
9 packers in 1955 and 1956

Size and type of container	1955		1956	
	Volume (lbs)	Per cent of total volume	Volume (lbs)	Per cent of total volume
<u>Consumer sizes</u>				
12/5-lb Tin	291,290	22.7	294,325	24.3
24/1-lb Q	276,589	21.5	258,117	21.3
12/2-lb Q	102,674	8.0	90,170	7.4
6/5-lb RJ	89,830	7.0	105,405	8.7
24/1-lb Tumb	76,124	5.9	55,025	4.5
24/1-lb FB	73,261	5.7	69,157	5.7
6/5-lb Tin	73,150	5.7	82,905	6.8
24/4 1/2-lb Tin	57,888	4.5	41,036	3.4
24/8-oz Q	52,840	4.1	56,439	4.6
Others	191,253	14.9	161,765	13.3
Total	1,284,899	100.0	1,214,344	100.0
<u>Bulk sizes</u>				
1/650-lb Drum	978,210	78.4	756,260	65.7
1/60-lb Can	266,235	21.4	382,620	33.3
Others	2,383	.2	11,630	1.0
Total	1,246,828	100.0	1,150,510	100.0
All honey	2,531,727	---	2,364,854	---

Flow of Honey from Hive to Consumer

The chart on page 31 is a graphic illustration of the production and marketing phases of the honey industry as practiced in Florida.

As stated previously, there are approximately 100 large full-time commercial beekeepers in Florida, and many part-time and hobby beekeepers. The varieties of honey they produce have been discussed in a previous section of this work.

Some of the commercial beekeepers also process and pack the honey they produce. The majority of beekeepers sell their production in bulk containers to the commercial packers. These packers, in turn, process the honey by filtering or straining and pack it in small consumer-size containers or in bulk for distribution to wholesalers, corporate chains, co-op chains, gift stands, independent retailers, other honey packers, bakers, candy makers, and others. The final step in the distribution process is, of course, the consumer.

As illustrated in the chart, the wholesale distributors are frequently bypassed since small honey packers sell large volumes of honey directly to outlets on the retail level. The basic idea underlying the sequence of discussion in this dissertation follows the simple chronological movement of raw honey from its delivery at the packing plant, to its final wholesale or retail destination. Each phase of the movement of honey has been described as it relates to the over-all picture of packing and distribution, and it is illustrated in the industry flow chart (Figure 4).

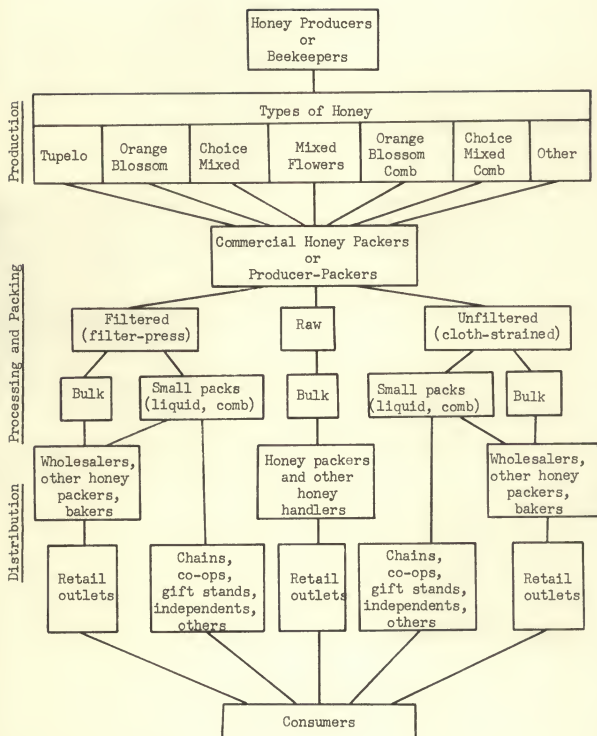


Fig. 4.-- Flow chart of honey from beehive to consumer.

CHAPTER III

METHODS OF OPERATION AND COST OF PROCESSING AND PACKING HONEY

General Plant Procedure for Processing and Packing

The mechanical layout for processing and packing honey in the nine plants studied were all different. These differences were due to (1) floor area available, (2) whether plant was also used for extracting honey from comb or other beekeeping operations, (3) method of heating honey with a steam boiler or electrical heating unit, and (4) if filtering equipment was used.

However, the general procedure of processing and bottling was as follows:

Honey was dumped, or pumped, from 55-gallon drums into a preliminary heating tank. It was then pumped to individual storage tanks which held different varieties until needed for blending and/or bottling. Blending was accomplished by combining different kinds of honey from the storage tanks in a mixing tank. Orange Blossom and Tupelo were not usually blended with any other kinds. However, if the color was not right, they were blended with other shades of Orange Blossom or Tupelo, respectively, to correct the color.

If honey was to be filtered, filter-aid was added and thoroughly mixed in. The mixture was then heated in a flash heater to 130° - 140° F. At this temperature it became a thin liquid and was pumped through a

filter press. Firms which did not use filtering equipment also heated the honey (omitting filter-aid) to 130° - 140° F. but strained it through 80-mesh cloth.

The next step was cooling. This was done by passing the hot liquid through cooling coils to a bottling or settling tank. Further time for air cooling in the tank was allowed if necessary. After cooling, jars (or other containers) were filled directly from a spigot on the bottling tank, if the operation was manual. Otherwise, filling was accomplished with semiautomatic filling machines. For all comb packs, chunks of cut comb were first inserted in the containers and then liquid honey was added manually to assure a complete fill.

Containers were labeled manually in all plants either before or after the bottling operation, depending on the system used in each plant. Capping was also a manual operation in all plants, after which the filled containers were packed into corrugated cardboard cartons. The cartons were then sealed, labeled, and stacked for shipment.

The filtering equipment was cleaned at the end of each working day. Tanks and lines were cleaned each time a different type or grade of honey was to be processed, in order to eliminate contamination of the new run.

Handling of Raw Honey in Storage

Packing honey is a year-round operation. The speed of its movement from packers into wholesale or retail channels depends on consumer demand. The items packed are determined by the incoming orders from customers.

Honey has rather stable physical properties and is not considered a perishable commodity. Though it may crystallize in storage, it will keep indefinitely in that state if stored in sealed drums, preventing the absorption of moisture from the atmosphere in any appreciable amounts. By its hygroscopic nature, it destroys most organisms, but yeasts can cause fermentation if moisture content becomes too high and if other cultural conditions are present. This is especially true of comb honey that is stored in hive supers until needed for cutting into chunks for comb packs.

The proper storage of comb requires a well-sealed room with the moisture content of the room at a low level. In this respect, the high temperatures and humid climate of Florida create a problem but not one that is too difficult to overcome with a dehumidifier. The yeasts which readily develop and cause fermentation under uncontrolled conditions are easily held in check by proper precautionary measures.

A lengthy storage period may result in a darkening of the color of honey but this does not affect its quality or flavor. However, since consumers prefer the lighter shades, color is an important factor to consider when storing table grades.

Method of Calculating Costs of Processing and Packing

The cost data used in this study were obtained from the records of nine firms. Five of these firms processed by filtering and four used the cloth-straining method. For the purposes of this study, the first is referred to as Filtered and the latter as Unfiltered.

A tentative schedule of expense accounts was used for the collection of cost data. From this schedule a consolidated list was prepared which was used in the cost-of-packing tables.

The cost-of-packing list of expenses was made up of five major categories to derive the total cost of packing and administration: (1) materials, (2) labor, (3) other direct operating, (4) indirect operating and (5) administrative.

In order to derive the average industry cost for each size and type of container used, the various costs for each size container were initially calculated for the individual firms. Then, a weighted industry average was obtained for each size container by combining the costs of the firms which filtered honey as an industry group. The costs for the firms not filtering were derived in a similar manner and combined as a group.

The principal categories for expenses, those included in each category, and methods of apportioning specific costs were as follows:

1. Material expense.--Material expense included cost of jars, caps, trays, spoons, labels for jars, labels for cartons, cartons for mail tins, wax flowers and sealing wax. To obtain total cost, the unit cost of each item of material was applied to the number of units used for each size and type container.

2. Labor expense.--Labor expense included filling, capping, labeling, soldering mail tins and wrapping mail tins. The filling and labeling expense was a sum of all labor used for processing, filling, capping, labeling, cartoning and general plant labor needed to expedite the packing operation. In the calculations for individual firms, the

above labor costs were derived from available labor-time records and estimates of labor requirements furnished by the plant operators.

3. Other direct operating expense.--This category of expense included power, light, water, repairs to building and equipment, miscellaneous supplies and fuel oil. These costs were apportioned on the basis of their percentage in relation to the cost of filling labor since this labor was directly associated with the rate of flow of completed packs of honey. The movement of honey in the packing line depended on the speed of the filler, whether it was a semiautomatic machine or a worker filling bottles by hand.

4. Indirect operating expense.--The indirect or fixed costs included fire and casualty insurance, taxes and licenses, depreciation, interest on long-term debts, and rent. The firms studied placed compensation insurance in the insurance account and payroll taxes in the taxes and licenses account. These costs were allocated on the basis of the percentage of each expense account to the total labor cost, since overhead costs were related to total labor costs.

5. Administrative expense.--Administrative expense included management, office salaries, office expenses, auto and travel, short-term interest, telephone and telegraph. The administrative expenses were allocated on the basis of the percentage of each item of expense in this category to total packing cost.

Selling costs were not set up as a separate category of expense in this report since the firms studied were not large enough to justify separate sales forces. Brokerage fees for selling were deducted from the delivered price of shipments (as were discounts and transportation

cost) to derive an f.o.b. price received by packers. These cost items, commissions, discounts, and transportation are fully reflected in the returns to packers and are included in this study in the chapter on distribution. Some of the firms studied sold part of their honey without using the services of a broker. In this case, the cost of management time devoted to selling, plus the telephone and other expense used for selling were included in administrative expense.

Packing Costs of Four Principal Sizes of Containers

Three important consumer-size containers, for illustration of packing costs, were chosen on the basis of volumes of all honey sold in each. These were reviewed in Chapter II. The 1/60-lb Can was chosen to illustrate the cost of packing honey in bulk. The costs for packing a 1/60-lb Can are compared with similar costs for packing a case of 12/5-lb Tins also totaling 60 pounds (Tables 8 and 9).

The cost of packing shown in Tables 8 and 9 are on a per-case basis since the case was the common trading and shipping unit used in the industry. Calculations have also been made on a per-pound basis and included at the bottom of both tables. The 1/60-lb Can was considered equivalent to a case in this report.

The highest cost of packing, of the 4 sizes presented, was for the 24/1-lb Q jar which averaged 9.7 cents per pound over 2 years. For all sizes, the difference in cost between filtered and unfiltered was less than one cent per pound with the exception of the 1/60-lb can, in 1955, when cost of the unfiltered exceeded the filtered by 1.1 cents per pound. The lowest cost of packing, of 4 sizes, was for the 1/60-lb can at an average of 2.4 cents per pound for 2 years.

Table 8.--All honey, 1955--comparison of average costs of packing Florida honey per case and per pound in selected sizes, by type of container, filtered versus unfiltered, 9 packers

Type of container	24/1-lb Q		12/2-lb Q		12/5-lb Fin		1/60-lb Can	
	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
Number of packers	5	4	4	4	5	4	3	4
Average pounds packed	41,417	12,314	12,334	2,274	64,423	12,070	42,605	34,605
Costs per case:								
Material ^a	\$1.254	\$1.187	\$0.884	\$0.833	\$1.591	\$1.770	\$0.653	\$0.740
Labor ^b	.400	.598	.418	.381	.547	.278	.230	.231
Other direct operating ^c	.084	.062	.070	.072	.116	.121	.077	.132
Indirect operating ^d	.089	.196	.063	.194	.256	.323	.059	.173
Total packing costs	\$1.827	\$2.043	\$1.435	\$1.480	\$2.510	\$2.492	\$1.019	\$1.276
Administrative ^e	.337	.246	.307	.382	.460	.964	.133	.509
Total costs/case	\$2.164	\$2.289	\$1.742	\$1.862	\$2.970	\$3.456	\$1.152	\$1.785
Total costs/lb	\$0.090	\$0.095	\$0.073	\$0.078	\$0.050	\$0.058	\$0.019	\$0.030

^aMaterial includes jars, caps, labels for jars, labels for cartons.

^bLabor includes processing honey, filling, capping, labeling jars and cartons, and general plant labor.

^cOther direct operating expense includes power, lights, water, repairs to buildings and equipment, miscellaneous supplies, fuel oil.

^dIndirect operating expense includes fire and casualty insurance, taxes and licenses, depreciation, interest (1.term), rent.

^eAdministrative expense includes management and office salaries, office expense, auto and travel, short-term interest, telephone and telegraph.

Table 9.--All honey, 1956--comparison of average costs of packing Florida honey per case and per pound in selected sizes by type of container, filtered versus unfiltered, 9 packers

Type of container	24/1-lb Q		12/2-lb Q		12/5-lb Tin		1/60-lb Can	
	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
Number of packers	4	4	5	3	5	4	3	3
Average pounds packed	46,839	14,288	10,282	6,305	33,673	29,241	25,860	97,018
Costs per case:								
Material ^a	\$1.278	\$1.342	\$0.825	\$0.856	\$1.620	\$1.592	\$0.658	\$0.736
Labor ^b	.437	.598	.469	.313	.547	.338	.525	.186
Other direct operating ^c	.117	.058	.081	.064	.136	.111	.081	.077
Indirect operating ^d	.119	.207	.079	.157	.245	.226	.079	.114
Total packing costs	\$1.951	\$2.205	\$1.454	\$1.390	\$2.548	\$2.267	\$1.143	\$1.113
Administrative ^e	.439	.296	.366	.418	.434	.831	.157	.448
Total costs/case	\$2.390	\$2.501	\$1.820	\$1.808	\$2.982	\$3.098	\$1.300	\$1.561
Total costs/lb	\$0.100	\$0.104	\$0.076	\$0.075	\$0.050	\$0.052	\$0.022	\$0.026

^aMaterial includes jars, caps, labels for jars, labels for cartons.

^bLabor includes processing honey, filling, capping, labeling jars and cartons, and general plant labor.

^cOther direct operating expense includes power, lights, water, repairs to buildings and equipment, miscellaneous supplies, fuel oil.

^dIndirect operating expense includes fire and casualty insurance, taxes and licenses, depreciation, interest (1 term), rent.

^eAdministrative expense includes management and office salaries, office expense, auto and travel, short-term interest, telephone and telegraph.

Importance of Various Items of Cost

Materials

Of the five categories of expense shown in the tables of this report, cost of materials accounted for the largest share of total costs for all sizes of containers under discussion. For the four important sizes, materials cost ranged from a low of 41.5 per cent of total costs for the 1/60-lb Can, unfiltered, to 57.9 per cent for the 24/1-lb Q jar, filtered, in 1955; and 45.3 per cent for the 12/2-lb Q jar, unfiltered, to 53.7 per cent for the 24/1-lb Q jar, unfiltered, in 1956 (Table 10).

Labor

Labor costs ranged from 8.0 per cent of total costs for the 12/5-lb Tin, unfiltered, to 26.1 per cent for the 24/1-lb Q jar, unfiltered, in 1955, and from 10.9 per cent for the 12/5-lb Tin, unfiltered, to 25.8 per cent for the 12/2-lb Q jar, unfiltered, in 1956.

Other direct

Other direct costs in 1955 ranged from 2.7 per cent of total costs to 6.7 per cent, and in 1956, from 2.3 per cent to 6.2 per cent.

Indirect

Indirect or fixed costs were from 4.1 per cent of total costs to 10.4 per cent in 1955; and 4.3 per cent to 8.7 per cent in 1956.

Administrative

Administrative costs also contributed a sizable share to total costs, as did materials and labor. In 1955 these ranged from a low of 10.7 per cent of total costs to 28.5 per cent. In 1956 administrative

Table 10.--Percentage distribution of total packing costs for 4 popular size packs (includes administrative expense)

[illegible]

costs ranged from a low of 11.8 per cent to a high of 28.7 per cent for the packs shown.

Materials, labor and other direct costs were classified as variable costs for this study. However, administrative costs were a combination of variable and fixed costs when viewed from an industry standpoint. Some plant managers placed themselves on a straight fixed salary, weekly or annually, for their managerial services; others believed that salary should be based on a percentage of gross sales. Therefore, in calculating administrative costs, salaries for management were based on the terms outlined by the individual plant managers, in order to derive an average. Other costs within the administrative category were the actual costs as entered in the records of each firm.

In summary, it can be stated that for the 4 pack sizes discussed, those costs which can be definitely classified as total variable, ranged from 61.8 per cent of the total for the 1/60-lb Can, unfiltered to 83.4 per cent for the same pack, unfiltered, in 1955. In 1956 total variable costs ranged from 64.0 per cent of all costs for the 1/60-lb Can, unfiltered, to 81.8 per cent for the same pack, filtered.

Average Costs of Packing in Plants Studied

When this study was undertaken, it was assumed that an analysis of costs of packing would illustrate economies of scale--that large firms would have lower costs than small firms. However, the number of firms in the final sample were too few and their methods of operation too heterogeneous to be able to support such a theory. The average cost of packing one pound by each firm, in consumer-size containers with plain or comb honey, and in bulk is shown in Table 11. Administrative costs are not included. The firms are arranged in descending order of volume handled in each year, (F, D, C, A and B used the filtering process).

It is important to note that the average cost per pound (column 3) to pack all honey was largely determined by what per cent of each firm's output was sold in bulk. More important are the cost figures in column 5 for consumer size packs. Firm E, which had the smallest volume of plain packs in 1955 (though second in total volume), also had the lowest cost per pound for these packs. Its cost of packing bulk was slightly higher than the average of all firms but was 6.6 cents higher per pound for comb than the average, having sold a very small volume of it. In 1956, Firm E had the largest volume of sales. It lowered its costs in both plain and comb packs, but had a fractional increase in bulk packing cost.

Firm I was the smallest of the firms. However, its cost of both plain and comb packs compared very favorably with the largest in both years.

Table 11.--All honey--average cost of packing one pound of honey, relative to plant volume

Plant	All honey			Consumer sizes				Bulk sizes	
	Total volume packed (lbs)	Packing cost per lb ^a	Packing cost per lb ^a	Plain honey		Comb honey		Plain honey	
				Volume (lbs)	Packing cost per lb ^a	Volume (lbs)	Packing cost per lb ^a	Volume (lbs)	Packing cost per lb ^a
1955									
F	1,078,134	\$0.0400		494,585	\$0.0595	106,034	\$0.1042	477,515	\$0.0064
E	360,948	.0134		11,596	.0516	2,215	.1669	367,137	.0112
D	375,077	.0851		363,968	.0838	11,109	.1294	-----	-----
C	195,251	.0480		120,035	.0546	9,396	.1729	65,820	.0174
A	173,448	.0890		88,942	.0947	84,431	.0832	75	.0188
G	160,222	.0540		126,130	.0613	312	.1112	33,780	.0264
H	157,483	.0139		15,259	.0893	2,894	.0800	139,330	.0064
B	85,459	.0685		77,511	.0642	7,469	.1164	480	.0221
I	39,335	.0564		36,529	.0543	2,746	.0855	60	.0142
Total	2,645,357	\$0.0470		1,334,555	\$0.0684	226,605	\$0.1012	1,084,197	\$0.0094
1956									
E	635,737	\$0.0168		83,597	\$0.0445	5,130	\$0.1168	547,010	\$0.0117
F	528,944	.0630		367,163	.0672	61,367	.1282	100,414	.0078
D	318,126	.1230		266,837	.1223	31,289	.1233	-----	-----
G	202,704	.0436		154,692	.0508	672	.0881	47,340	.0204
C	192,924	.0462		135,744	.0576	---	.0888	57,180	.0193
H	166,139	.0137		18,435	.0713	316	.0868	147,388	.0063
A	148,719	.0843		94,576	.0874	54,143	.0788	-----	-----
B	79,028	.0724		69,681	.0682	8,327	.1137	1,020	.0210
I	46,674	.0584		42,163	.0552	4,511	.0877	-----	-----
Total	2,318,995	\$0.0536		1,252,888	\$0.0765	165,755	\$0.1099	900,352	\$0.0113

^aDoes not include administrative costs.

Factors Affecting Costs of Processing and Packing

Materials

The most important of the items affecting packing costs can be classified as materials--cartons, bottles, tins, labels, caps, etc.

The lack of standardization in types of containers within the industry has been reviewed elsewhere. This in itself affected differences in costs between firms.

However, in addition, the methods used in purchasing materials greatly influenced the final costs to firms. Some firms were able to realize sizable savings by purchasing jars and tins in large volumes, frequently in carload lots. In this way they were able to take advantage of volume discounts and lower freight charges for the materials purchased, though this type of buying requires provision for storage areas.

Three packers, who purchased the 24/1-lb Q ovaline jars in carload lots in 1956 paid \$1.09, \$1.14 and \$1.18 respectively per case including caps. Other packers, buying the same containers in smaller quantities paid prices ranging from \$1.24 to \$1.69 per case. For the 12/5-lb Tins costs varied from \$1.44 per case, when purchased in large lots, to \$1.65 per case in small lots. Two firms that had their own lithographed 5-lb Tins were able to purchase them for \$1.47 per case, when buying in large volumes. This eliminated the cost of labels and also the cost of labor for pasting labels on the containers. Tins were available with a standard litho imprint about honey without the name of any specific firm. However, with a small initial investment, a honey-packing firm could contract with a can manufacturer to design

and engrave lithograph plates with the firm's name or brand on them. The litho plates could be used for the manufacture of approximately one million cans.

The cost of labels also varied between firms. Small labels were used on bottles and were also pasted on 5-lb tins. There was no attempt to differentiate types of labels used by firms beyond using the costs as they applied. However, the labels used were of various kinds. Some were simple paper labels identifying the packer and type of honey. These were purchased by one packer (G) at 90 cents per M when bought 100M at one time. Other labels were of the single-color, embossed type and ranged in price from \$2.41 per M bought 150 M at one time, to \$4.36 per M bought 25 M at one time. Two-color embossed labels, used by one of the firms, cost \$3.00 per M when bought 210 M at one time. One firm used all three types of labels, others used only two, or one, depending on firm preference.

Wrap-around labels were used by two of the firms on the plain 5-lb and 2 1/2-lb tins instead of the small labels discussed above. The cost of wrap-arounds averaged \$12.33 per M for the two firms.

In respect to bottle tops or caps, costs varied depending on whether the cap was lithographed or plain. For the 24/1-lb Q jar there was an additional cost of 3 cents per case for lithographed caps with the imprint "Pure Honey." Costs of litho-caps varied from 2 to 17 cents additional per case depending on the jar size.

It was evident that a reduction of costs could be realized by firms through large volume purchases of materials and the kinds of materials used.

Filling and packing labor

Two of the nine firms studied, plants D and F, had semiautomatic filling machines for filling small consumer-size containers. The other seven firms used a standard gate-type honey spigot operated by hand.

The machine-filler, in use, was very efficient for filling the common wide-mouthed jars used in the honey-packing industry. However, this type filler was not as effective for filling some of the novelty packs which usually have small openings and require accurate placement of the container under the filler spout. It was the observation of the writer that the full potential output of these fillers was not realized because of numerous interruptions and work stoppages. These interruptions were due primarily to the fact that there were not enough workers to handle the high output of the machines. Occasionally a worker would leave his stand to check on the processing operation which precedes filling, or he would be required to help shift materials to and from the filler. At times the filling machine would drift from its delivery-volume setting and the same or another worker would stop the operation to reset it. While any one worker was preoccupied with tasks of this kind, the filler would be shut off. These stoppages would result in an accompanying time-lag in operations for all the workers. Change-overs from one size container to another also added to time-lags while the filler was readjusted to accommodate the new size. However, even with these drawbacks the increased production possible with a machine filler when properly used, as demonstrated by the high output of firm F, justified its use.

It should be noted that neither firm had any supplementary bottling equipment to unscramble bottles, or to cap and label them, such as is installed in some of the more modern food-packing houses with newly developed and efficient mass production systems.

A few of the plants had adopted the use of simple but effective roller-conveyor systems for shifting of empty and filled cases, while others used small dollies or hand trucks for this purpose.

The semiautomatic filler was capable of setting a fast pace for the rate of flow of production when everything was operating properly.

The manufacturer's specifications, for the filler used, stated that a minimum of 300 cases of 24/1-lb jars could be filled in an 8-hour day. The maximum was 400 cases. Plant F filled and capped 200 cases of 24/1-lb jars per day with 3 workers, whereas Plant D completed an average of 110 cases per day with 3 workers. The life expectancy of the machine filler was 25-35 years. However, it was being depreciated by the packers in 15 years at \$115 a year and maintenance cost was approximately \$12 per year.

In the 7 other plants, the rate of flow of production depended on the dexterity of the workers who filled the bottles by operating the gate-type spigot with one hand and placed the empty bottles into position with the other hand. The rate of filling and capping varied widely between these plants. Packing the 24/1-lb jars, one plant had the lowest rate of 72 cases per 8-hour day with 3 workers. One other plant also had a low rate of 75 cases daily. Four plants packed 100 cases, and the highest was 109 cases per day with 3 workers.

Labeling labor

The production line and the floor layout were different in all nine plants. In some plants labeling was performed before filling as a separate operation by one or more workers. This method required double handling of each container--once when it was labeled and placed back into its carton and again when it was removed from the carton for the filling operation. A second method was to label the containers either immediately before or after filling, and as part of the filling operation. This system eliminated rehandling each container.

As with filling, the labeling rate varied between plants. Using the 24/1-lb jars as a basis of comparison, it was found that the highest labeling rate in 4 of the plants was 10 cases per hour per worker. The lowest rate was 4.9 cases per hour in one plant. The others were 6.6, 7.5, 8.0 and 9.4 cases per hour per worker. The average rate of labeling for nine plants was 8.5 cases per hour per worker.

Packing comb honey

The packing of comb honey was a manual operation in all plants. This was due to the requirement of cutting pieces of comb to approximately the same dimensions for inserting into the containers and filling the remaining area in the containers with liquid honey to a line just above the lower edge of the cap when it was screwed on. Though the differences would be slight in the amount of liquid honey used in each pack, it was not practical to use the machine-fillers in the comb-packing operation since some of the jars would be filled to overflowing and others would be short-weighted. This was because the chunks of

comb placed in the jars varied in size. The labor time required for this operation depended on the dexterity of the comb cutter(s) and also on the quality and uniformity of the comb honey being processed. In addition to cutting the comb to size, the worker would cut out all dark areas of the comb which would detract from its appearance in a glass bottle and perhaps be rejected as inferior in quality by the consumer. Therefore, a poor batch of comb would require considerable extra labor in its preparation.

A comparison of the rates of packing 24/1-lb jars of comb between plants showed the lowest rate to be 48 cases per 8-hour day per 3 workers. Two plants packed 50 cases, one plant--53 cases, one plant--62 cases, and the highest rate of 72 cases by 2 plants. The two remaining plants did not pack any comb.

Wage rates and availability of labor

Differences in cost of packing varied between firms because of their methods of packing procedure as described above, and also because of differences in the wage rates paid to plant labor.

Vertically integrated firms utilized their male employees in their apiaries as beekeepers and in the packing plants as packing workers on the basis of a weekly salary. This method of operation benefited the employee in having full-time work and the packer had him on hand when needed for packing. Part-time female workers were usually available at a lower wage rate when help was needed in the packing operation.

Those firms which specialized more in packing than in production of honey usually had female workers in the plant and had one male worker for the heavy duties. Though the discussion may infer very large-scale operations, it should be pointed out that a total of five workers was the largest number in any of the nine plants studied.

The salaries of male workers ranged from \$1.00 to \$1.37 per hour in the two-year period studied. Female workers received \$1.00 to \$1.25 per hour.

In summary, the average costs of packing the various sizes and types of containers are greatly influenced by a combination of the above factors as they affect each firm.

CHAPTER IV

SELLING POLICIES AND PRACTICES

Pricing

The purpose of this and the following sections is to describe the approach used by honey packers in arriving at the prices they received for their finished products, and to evaluate their selling policies and practices in relation to types of sales, discounts, and brokers' commissions. The discussion on pricing is based on personal interviews with packers.

In regard to pricing, some packers approached the pricing decision by probing the market on the basis of the previous season's prices or the advertised prices of other packers. Through a system of probing, and bargaining with customers these packers settled on prices acceptable to themselves and their customers.

Other packers were more aware of their packing and selling costs. They took into consideration the costs of raw honey, packing materials, packing labor, plant overhead, depreciation of plant and equipment, administration, discounts to customers, brokers' commissions and freight. It was with these costs, as a basis, that this group of packers probed the market. In addition, they consulted with their brokers if they sold in distant or out-of-state markets. Brokers were in a position to advise on the prevailing prices of competitive brands of honey in distant markets where consumer preference could differ from that in Florida.

This approach to the pricing decisions does not imply that prices were determined by costs but only that packers used costs as a point of departure, or reference point, from which to make an offer to sell their products.

Price is determined by supply and demand, and in the short run, an individual does not price his product on the basis of cost. In the long run, price will have to equal cost for him to stay in the market. The price tends to equal the average cost of all producers and not the cost for each individual. If a packer's costs are too high for him to compete in the market, he has a number of alternatives; (1) withdraw from the market, (2) introduce more efficient methods of packing in order to reduce costs, or (3) re-evaluate the expected returns for his own management and labor downward, in an effort to become competitive.

The actual experience of Packer I may serve to illustrate a decision on pricing that occurred at the time of this study. He was a producer-packer and on the basis of his own production had estimated a short supply of Orange Blossom honey for that season. Secondly, he was confronted with an increase in costs of materials and labor for packing. Therefore, he circularized his regular customers notifying them of higher prices for the packs he supplied them. However, the attempt to raise prices was disappointing because his customers resisted the increases since other packers were willing to sell comparable packs at lower prices. This type of probing for higher prices by one seller was foredoomed in a free market under pure competition since Packer I was just one seller among many sellers and many buyers. Though market news reports for Florida honey had not been established for specific

market areas on a regular basis, the buyers could easily obtain the then current prices of other packers. In the case under discussion, Packer I decided to withdraw from the market. He had suffered losses on his packing operations in previous seasons and was of the opinion that he could not recover his increased costs if he continued.

It is the opinion of the writer that a more orderly marketing and pricing system could be established in Florida if beekeepers and honey packers supplied price data to the State Marketing Bureau, or some other market agency. Then such data could be included in agricultural market news reports. Citrus canners in Florida supply such information to their own Florida Canner's Association. It is then released to all members in daily and weekly consolidated reports. Data from each canner remains confidential and only industry averages are released.

Type of Sales and Prices Received by Type
of Sale and Type of Buyer

Types of sales

Honey packers in Florida sold their products by a number of different methods. The methods used were determined by the size of their operations and the degree of integration in production and marketing.

Some small packers, those not engaged in the commercial type of packing on which this study is based, sold at retail directly to consumers from their own roadside stands, or front yards. Such sellers were usually small beekeepers, or bee hobbyists, who bottled their surplus honey to supplement their regular incomes.

However, commercial packers used a more direct approach in selling by utilizing the existing wholesale and retail marketing channels to facilitate movement of their products to the consumer. These methods of selling assured them of larger sales volumes and greater distribution areas.

FOB sales.--Data on sales showed that in 1955, honey sold on an f.o.b. "pick-up-by-buyer-basis" in consumer-size containers amounted to 15.7 per cent of all sales. Bulk honey sold f.o.b. "pick-up-by-buyer" amounted to 35.4 per cent for the same period. In 1956, the percentages were 18.0 and 36.9 respectively (Tables 12 to 15). This meant that 51.1 per cent of all sales in 1955 were picked up and transported from the honey-packing plants by buyers. The percentage in 1956 was slightly higher, being 54.9 per cent of all sales.

It should be stressed in connection with f.o.b. pick-up-by-buyer sales of consumer-size items that the customers were usually locally-operating establishments or chain stores, which had delivery trucks operating in the areas where the honey-packing plants were located. Thus, they were able to achieve savings in transportation costs by pick-ups directly at the plants. For bulk sales, savings in transportation costs to the purchasers were also an important factor and, therefore, very large volumes were usually picked up by bulk customers.

A further observation, in connection with f.o.b. sales, was that the sale transactions were negotiated directly between the honey packer and the customer, without the aid of a third party (usually a broker) as occurred with delivered sales.

Table 12.--All filtered honey, 1955--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. price received per pound by 9 packers by type of sale

Type of sale	No. of lots	Volume lbs	Average volume per lot lbs	Per cent of total volume ^e	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
FOB (pickup) ^a	1,370	365,210	267	14.4	\$ 80,997	\$0.222
Delivered packer ^a	3,510	457,719	130	18.1	95,660	.209
broker ^b	883	237,407	269	9.4	54,694	.230
refunds ^c	(68)	(2,255)	(33)	(d)	(820)	(.363)
Consignment ^b	107	20,922	196	.8	4,608	.220
Custom pack ^a	<u>10</u>	<u>1,987</u>	<u>199</u>	<u>d</u>	<u>415</u>	<u>.209</u>
Total	5,812	1,080,990	186	42.7	\$235,554	\$0.218
<u>Bulk sizes</u>						
FOB (pickup) ^a	58	313,209	5,400	12.5	\$ 39,933	\$0.127
Delivered packer ^a	21	130,500	6,214	5.2	16,644	.129
broker ^b	50	36,427	729	1.4	5,333	.146
Custom pack ^a	<u>2</u>	<u>50</u>	<u>25</u>	<u>d</u>	<u>7</u>	<u>.140</u>
Total	131	480,186	3,666	19.0	\$ 61,917	\$0.129
All sizes	5,943	1,561,176	263	61.7	\$297,471	\$0.191

^aSales arranged by packer.

^bSales arranged by broker.

^cRefunds are deducted for returned goods.

^dLess than 0.05 per cent.

^ePercentages in this column must be added to those in Table 13 to equal 100 per cent.

Table 13.--All unfiltered honey, 1955--volumes sold, size of average lot, f.o.b. returns, and average f.o.b price received per pound by 9 packers by type of sale

Type of sale	No. of lots	Volume lbs	Average volume per lot lbs	Per cent of total volume ^e	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
FOB (pickup) ^a	181	32,741	181	1.3	\$ 6,516	\$0.199
Delivered packer ^a	1,787	171,350	96	6.8	29,539	.172
refunds ^c	(12)	(182)	(15)	(d)	(38)	(.209)
Total	1,956	203,909	104	8.1	\$ 36,017	\$0.177
<u>Bulk sizes</u>						
FOB (pickup) ^a	173	582,128	3,365	22.9	\$ 73,508	\$0.126
Delivered packer ^a	90	184,478	2,050	7.3	21,045	.114
Custom pack ^a	1	36	36	d	5	.139
Total	264	766,642	2,904	30.2	\$ 94,558	\$0.123
All sizes	2,220	970,551	437	38.3	\$130,575	\$0.135
All honey	8,163	2,531,727	310	100.0	\$428,046	\$0.169

^aSales arranged by packer.

^bSales arranged by broker.

^cRefunds are deducted for returned goods.

^dLess than 0.05 per cent.

^ePercentages in this column must be added to those in Table 12 to equal 100 per cent.

Table 14.--All filtered honey, 1956--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. price received per pound by 9 packers by type of sale

Type of sale	No. of lots	Volume lbs	Average volume per lot lbs	Per cent of total volume ^e	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
FOB (pickup) ^a	1,123	362,167	322	15.3	\$ 84,090	\$0.232
Delivered packer ^a	3,217	368,785	115	15.6	83,024	.225
broker ^b	542	135,720	250	5.7	33,248	.245
refunds ^c	(23)	(221)	(10)	(d)	(66)	(.299)
Consignment ^b	118	18,768	159	.8	4,289	.229
Custom pack ^a	34	18,964	558	.8	2,942	.155
Total	5,012	904,183	180	38.2	\$207,526	\$0.230
<u>Bulk sizes</u>						
FOB (pickup) ^a	33	39,462	1,196	1.7	\$ 6,397	\$0.162
Delivered packer ^a	18	25,544	1,419	1.1	3,927	.154
broker ^b	30	47,243	1,575	2.0	6,939	.147
Custom pack ^a	3	50	17	d	7	.139
Total	84	112,299	1,337	4.8	\$ 17,270	\$0.154
All sizes	5,096	1,016,482	199	43.0	\$224,796	\$0.221

^aSales arranged by packer.

^bSales arranged by broker.

^cRefunds are deducted for returned goods.

^dLess than 0.05 per cent.

^ePercentages in this column must be added to those in Table 15 to equal 100 per cent.

Table 15.--All unfiltered honey, 1956--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. price received per pound by 9 packers by type of sale

Type of sale	No. of lots	Volume lbs	Average volume per lot lbs	Per cent of total volume ^e	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
FOB (pickup) ^a	305	64,225	211	2.7	\$ 13,986	\$0.218
Delivered packer ^a	1,662	246,298	148	10.4	45,389	.184
refunds ^c	(14)	(362)	(26)	(d)	(91)	(.250)
Total	1,953	310,161	159	13.1	\$ 59,284	\$0.191
<u>Bulk sizes</u>						
FOB (pickup) ^a	168	833,315	4,960	35.2	\$116,056	\$0.139
Delivered packer ^a	73	204,896	2,807	8.7	25,097	.122
Total	241	1,038,211	4,308	43.9	\$131,153	\$0.136
All sizes	2,194	1,348,372	615	57.0	\$200,437	\$0.149
All honey	7,290	2,364,854	324	100.0	\$425,233	\$0.180

^aSales arranged by packer.

^bSales arranged by broker.

^cRefunds are deducted for returned goods.

^dLess than 0.05 per cent

^ePercentages in this column must be added to those in Table 14 to equal 100 per cent.

Delivered sales.--Some packers made their own deliveries in local areas. However, many of the terminal markets for honey were located at great distances from Florida. Customers in these out-of-state markets preferred to purchase packed honey on a delivered basis because they knew, at the time of purchase, exactly what a shipment would cost delivered to their door. In this method of sale, prices were quoted delivered, though frequently there was a stipulation that each order must be for a specific minimum volume of honey. This was required because commercial carriers charge a minimum rate which starts at the 200 gross-pound level. It was economically not feasible to ship lesser weights long distances and continue to meet competitive prices in those areas.

Delivered sales were separated into two groups (Tables 12 to 15)--those in which the packer negotiated the sales and those in which a broker completed the selling function. It was found that packers acting as their own salesmen accounted for 37.3 per cent of all honey sold in 1955. Delivered sales transacted by brokers made up 10.8 per cent of total volume for the same period. In 1956, the percentages were 35.8 per cent for direct sales by packers, and 7.7 per cent for those by brokers. From the same data, it was evident that in 1955 packers' delivered sales were 3.5 times greater in volume than the sales made by brokers. In 1956, delivered sales by packers were 4.6 times greater in volume than those made by brokers. This was due to a serious decline in over-all output of one packer who normally dealt through brokers for a large proportion of his sales.

A point of interest in connection with brokers' sales was that all honey sold by them was processed by the filtering method.

Consignments, custom packs and refunds.---Although the volume of consignments, custom packs, and refunds amounted to a very small part of total sales percentagewise, they were listed in detail to illustrate their relative importance.

Consignments were 0.8 per cent of total sales in both years studied. The consignment, as practiced in the honey industry, was different from the same type of sale generally used for other agricultural products. In the honey business, a quantity was consigned to a broker to be sold at a price prearranged by packer and broker. The packed honey was stored by the broker in his own warehouse for the purpose of facilitating faster deliveries to wholesale and retail outlets in his territory. The storage charge was usually included in the broker's commission and the packer realized a saving in freight charges on large volume shipments to the broker's warehouse.

Custom packs were less than 0.05 per cent of sales in both years. These were all sold on an f.o.b. pick-up basis, the difference in the sale being that materials for packing were furnished by the customer, and the packer supplied honey and labor. Custom packs in most instances were of the novelty type such as ceramic mummies and odd-shaped ceramic pottery--the type of packing which caters to the gift tourist trade.

Refunds amounted to 0.1 per cent of all sales in 1955, and were less than 0.05 per cent in 1956. These small quantities were usually items left over at gift-stands at the end of the tourist season, and

refunds were made when the stands closed down for the summer.

There should be a few words of explanation for the exceptionally high prices reflected by refunds. Among these were items such as 24/8-oz Servers of Orange Blossom honey which were sold delivered at a price of 60 cents per pound, or items like the 12/8-oz Server Sets priced at one dollar per pound. These prices were a reflection of the high-cost containers required for packing rather than the cost of the honey with which they were filled.

Average f.o.b. prices received by type of sale

The range of f.o.b. prices within various types of sale were considerably higher for filtered honey than for unfiltered in both years studied (Tables 12 to 15). The over-all average f.o.b. prices per pound for all filtered honey, in all types of containers, were higher for the sales through brokers than for packers' direct sales (f.o.b. and delivered). In 1955 the average f.o.b. price received by packers for one pound of honey in consumer sizes sold through brokers' delivered sales was 23.0 cents compared to 22.2 cents and 20.9 cents for packers' direct sales f.o.b. and delivered respectively. Brokers' consignment sales brought an average of 22.0 cents per pound and packers' custom packs 20.9 cents.

A very important point should be stressed here concerning all discussions in this study on f.o.b. prices received. Though average f.o.b. prices are higher in some categories than in others, they also reflect the sales of higher priced packs and not necessarily higher net returns for honey after marketing costs are removed. Net prices received are discussed under the next subheading.

In filtered bulk sizes the average f.o.b. prices, in 1955, for all honey in drums and cans, sold as brokers' delivered sales, was 14.6 cents per pound compared to 12.7 cents when sold directly by packers, f.o.b. and delivered.

The f.o.b. prices received for unfiltered honey, in 1955, sold by packers only (there were no brokers' sales) were 19.9 cents f.o.b. and 17.2 cents delivered in consumer sizes, and 12.6 and 11.4 cents respectively in bulk.

The average prices received by packers in 1956 were similarly higher for brokers' delivered sales of all filtered honey than for sales made by packers. Returns on brokers' sales averaged 24.5 cents per pound of honey compared to 23.3 cents for f.o.b. and 22.5 cents for delivered sales when sold by packers in consumer size containers. However, in bulk size containers the situation on prices reversed in favor of packers' direct sales--f.o.b. sales averaged 16.2 cents and delivered sales were 15.4 cents when sold by brokers. The returns for unfiltered honey, in the 1956 season sold by packers were 21.8 cents for f.o.b. sales and 18.4 cents for delivered sales in consumer sizes; in bulk, prices received were 13.9 cents f.o.b. and 12.2 cents delivered.

Average net prices received for important packs by type of sale

A more detailed study of specific items within the various types of sales was completed in order to determine which item (or items) of packed honey resulted in greatest net returns per pound after deducting the cost of packing from the average f.o.b. prices received by packers. These results are presented in Tables 16 and 17. They are listed by

Table 16.---Average net return per pound of various types of honey
in selected consumer-size packs to 9 packers
by type of sale, 1955

Honey type and pack size	FOB		Type of sale		Consignment	
	Sale by packer		Delivered		Sale by broker	
	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
OB						
24/8-oz Q	\$0.119	\$0.100	\$0.110	\$0.111	\$0.090	\$0.103
12/1-lb Sv	.169	----	.104	.115	-.089	.103
24/1-lb FB	.087	----	.078	.112	.123	----
24/1-lb Q	.139	.122	.121	.121	.116	.117
12/2-lb Q	.147	.129	.122	.137	.103	.110
24/2 1/2-lb Tin	.155	----	----	.140	----	----
6/5-lb RJ	.152	----	.138	.145	.116	----
12/5-lb Tin	.137	.124	.112	.122	.109	----
LA						
24/8-oz Q	.093	.085	.087	.105	.090	.087
24/1-lb Q	.115	.104	.096	.103	.096	.096
6/5-lb RJ	.136	----	.123	.125	.125	.125
12/5-lb Tin	.082	.089	.117	.093	.111	----
A						
12/4 1/2-lb Tin	.124	----	----	.119	----	----
6/5-lb Tin	----	.091	----	----	.083	----
OBC						
24/1-lb FB	.145	----	.138	.172	.116	----
24/1-lb Q	.161	----	.151	.162	.135	----
24/1-lb Tumb	.149	-.045	.126	.138	-.063	.125
12/2-lb Q	.167	----	.154	.176	.006	----
12/2 1/2-lb Sq	.167	.117	.145	.190	.082	.158

Table 17.---Average net return per pound of various types of honey
in selected consumer-size packs to 9 packers
by type of sale, 1956

Honey type and pack size	FOB		Type of sale				Consignment	
	Sale by packer		Delivered		Sale by packer		Sale by broker	
	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
OB								
24/8-oz Q	\$0.118	\$0.999	\$0.112	---	\$0.115	\$0.097	\$0.094	---
12/1-lb Sv	.152	-.005	.117	---	.135	-.030	.099	---
24/1-lb FB	.108	---	.103	---	.117	.112	---	---
24/1-lb Q	.141	.127	.127	---	.133	.123	.116	---
12/2-lb Q	.154	.138	.133	---	.141	.121	.116	---
24/2 1/2-lb Tin	.198	---	---	---	.155	.114	---	---
6/5-lb RJ	.163	---	.147	---	.162	.127	---	---
12/5-lb Tin	.147	.146	.135	---	.126	.132	---	---
LA								
24/8-oz Q	.099	.087	.089	---	.110	.096	.079	---
24/1-lb Q	.126	.106	.115	---	.105	.098	.106	---
6/5-lb RJ	.151	---	.130	---	.141	---	.127	---
12/5-lb Tin	.113	.137	.123	---	.098	.104	---	---
A								
12/4 1/2-lb Tin	.110	---	---	---	.117	---	---	---
6/5-lb Tin	---	.108	---	---	---	.105	---	---
OBC								
24/1-lb FB	.146	---	.158	---	.163	---	---	---
24/1-lb Q	.186	---	.188	---	.182	.143	---	---
24/1-lb Tumb	.127	.088	.107	---	.126	.096	.099	---
12/2-lb Q	.186	---	.190	---	.198	---	---	---
12/2 1/2-lb Sq	.143	.132	.116	---	.169	.150	---	---

variety of honey and type of pack. Each consumer-size item shown had a sales volume exceeding 20,000 pounds in either 1955 or 1956 for the combined sales of all 9 packers studied, and represented 88.0 per cent of the total volume of consumer packs in both years.

However, unlike the average f.o.b. prices discussed in the preceding section, these are net prices received per pound of honey--all cost of packing, selling and delivering are excluded.

Net returns from brokers' sales of filtered honey in consumer packs in 1955 were higher than the returns from packers' own sales for only one specific item--the 12/5-lb Tin of Light Amber, returning a net of 11.8 cents per pound for brokers' delivered sales versus 8.2 cents and 9.3 cents from packers' f.o.b. and delivered sales respectively (Table 16). In 1956 two items had higher net returns from brokers' sales of filtered honey--the 12/5-lb Tin of Light Amber and the 24/1-lb Q (ovaline) jar of Orange Blossom Comb. The 12/5-lb Tin of Light Amber netted 12.3 cents from brokers' sales compared to 11.3 cents and 9.8 cents from packers' sales. For the 24/1-lb Q jar of Orange Blossom Comb, net was 18.8 cents for brokers, compared to 18.6 cents and 18.2 cents from packers' sales. For others the net was higher from packers' sales.

These net values are not a contradiction of the discussion in the previous section. It was pointed out in that discussion that the f.o.b. prices received were on an over-all basis of all varieties of honey and all types of packs combined. In the previous discussion, brokers' sales returned a higher average f.o.b. price to packers on an over-all basis because 40.0 per cent of brokers' sales in 1955 were

made up of the higher priced comb packs (ranging from 23 to 28 cents per pound f.o.b.) compared to packers' sales of comb packs which were only 14.7 per cent of the total packers' sales volume. In 1956 brokers' sales of comb were 16.3 per cent of their total sales compared to 13.5 per cent of total packers' sales.

Summarizing data from Tables 16 and 17, it was found that filtered honey netted higher returns on an average than the unfiltered in consumer packs. The maximum net return per pound of strained honey in 1955 was for the 12/1-lb Server of filtered Orange Blossom at 16.9 cents sold by packers f.o.b., and the minimum netted was 7.8 cents for the 24/1-lb Fish Bowl of filtered Orange Blossom from delivered sales by brokers. For comb packs in 1955, the maximum return was from the 12/2 1/2-lb Square pack of filtered Orange Blossom comb at 19.0 cents per pound for packers' delivered sales; the minimum return was a net loss of 6.3 cents on the 24/1-lb Tumbler of unfiltered Orange Blossom comb for packers' delivered sales.

In 1956, the maximum net, on items in the list of strained honey, was 19.8 cents for filtered 24/2 1/2-lb Tins of Orange Blossom from packers' f.o.b. sales; the minimum return was a net loss of 3.0 cents on the 12/1-lb Server of unfiltered Orange Blossom from packers' delivered sales. In the group of comb packs, in the same year, the maximum net received per pound was 19.8 cents for the 12/2-lb Q (ovaline) jar of filtered Orange Blossom comb from packers' delivered sales; the minimum was 8.8 cents for the 24/1-lb Tumbler of unfiltered Orange Blossom comb from packers' f.o.b. sales.

The bulk packs listed represented 99.9 per cent of all bulk honey sold over two years (Tables 18 and 19). In bulk packs, as in the consumer sizes, the firms which filtered honey received higher net returns per pound on average than the firms which did not filter it. It was also found that for some bulk packs, the net returns per pound of honey exceeded the returns on small consumer packs within the same types of sales. For instance, in 1955, the net return of 15.7 cents per pound of filtered Orange Blossom honey in 1/60-lb cans sold by packers, f.o.b., was higher than the net returns for 7 of the 8 consumer packs listed for Orange Blossom honey in the first column of Table 16. This was also found to be the situation when other varieties of honey in bulk packs were compared with consumer packs in both 1955 and 1956, and in filtered and unfiltered honey. In some instances honey sold in 650-lb drums brought a higher net return than for similar honey in some of the small consumer-size packs. These differences stem mainly from the fact that the costs of packing and shipping large bulk items are very much lower than similar costs for small consumer items, and packers did not or could not obtain prices to cover the higher costs on the small packs.

The higher net returns per pound of honey sold in bulk over net returns for the similar honey sold in small consumer packs raised an important point for discussion. It was suggested that, if such a condition did exist, it would be to the advantage of honey packers to discontinue packing in small containers and sell their output in bulk. At most it was claimed, they would use only 2 types of containers, 60-lb cans and 650-lb drums, and plant operation would be greatly simplified.

Table 18.--Average net return per pound of various types of honey
in the principal bulk-size packs to 9 packers
by type of sale, 1955

Honey type and pack size	FOB		Type of sale		Consignment	
	Sale by packer		Delivered		Sale by broker	
	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
OB						
1/60-lb Can	\$.157	\$.120	---	\$.155	\$.101	---
1/650-lb Drum	.136	.120	---	.138	.120	---
LA						
1/60-lb Can	.145	.100	---	.151	.075	---
				(export)		
1/650-lb Drum	.121	.120	---	.111	.124	---
A						
1/60-lb Can	.099	.100	---	---	.083	---
1/650-lb Drum	.118	.098	---	---	.101	---
DA						
1/650-lb Drum	---	.085	---	---	---	---
Clv						
1/650-lb Drum	---	.115	---	---	---	---
Tup						
1/60-lb Can	.191	---	---	.172	---	---
1/650-lb Drum	.161	---	---	---	---	---
OBC						
1/30-lb Super	.202	---	---	---	---	---

Table 19.---Average net return per pound of honey
in the principal bulk-size packs to 8 packers
by type of sale, 1956

Honey type and pack size	Type of sale					
	FOB		Delivered		Consignment	
	Sale by packer Filtered	Unfiltered	Sale by broker Filtered	Unfiltered	Sale by broker Filtered	Unfiltered
OB						
1/60-1b Can	\$0.166	\$0.128	----	\$0.167	\$0.100	----
1/650-1b Drum	.215	.131	----	----	.116	----
1A						
1/60-1b Can	.122	.119	----	.159	.100	----
1/650-1b Drum	.125	.131	----	.121	.131	----
A						
1/60-1b Can	----	.113	----	----	.101	----
1/650-1b Drum	.122	.113	----	----	.111	----
DA						
1/650-1b Drum	----	.099	----	----	----	----
CLV						
1/650-1b Drum	----	.114	----	----	----	----
Tup						
1/60-1b Can	.215	.174	----	----	----	----
1/650-1b Drum	----	.194	----	----	----	----
OBC						
1/30-1b Super	.235	.190	----	----	----	----

However, it should be stressed again that the data submitted herein are averages for 5 firms which filtered honey and 4 firms which did not filter it. The average net returns to these firms individually for specific consumer items would have a range above and below the averages calculated for each group of firms, and each firm would have to be considered individually to ascertain its relative position to the average.

A point of importance, which has been previously discussed, is that approximately 50 per cent of the total volume of honey sold, in the years studied, was already in bulk form. Before any one packer could sell all his output in bulk and hope to net a higher return, than if he packed in small containers, there would have to be a demand for his output added to the bulk volumes of other packers, who may also decide to go into the bulk business. With the creation of a greater supply of honey in bulk form it could well follow that the market could only absorb it at lower prices, thereby defeating the very purpose of making a change-over. A second point of importance is that if more honey would be sold this way, it would not necessarily have to be handled by the Florida packers now producing the small packs. Beekeepers could bypass them and sell directly to bulk dealers who bid against the packers of small items. One such bulk dealer, not included in this work, has been known to handle 2.5 million pounds of honey annually. This is equivalent to the combined annual volume of all 9 packers studied.

FOB prices received by type of sale and type of buyer

The over-all average f.o.b. prices received by 9 packers are in Tables 20 and 21. In 1955, the highest average price per pound of honey in consumer packs was 32.6 cents from packers' sales of custom packs to gift stands. The lowest amount received per pound from packers' sales was 17.9 cents to chain stores delivered. Brokers' delivered sales in that period ranged to a high of 26.7 cents sold to chains and a low of 17.0 cents for items sold to bakers. For bulk packs in 1955, the range of f.o.b. prices was a low of 11.2 cents per pound for packers' delivered sales to wholesalers and a high of 18.3 cents per pound from brokers' delivered sales to independent stores.

Whereas in 1955 the highest average f.o.b. price received per pound of honey in consumer packs was from custom sales to gift stands, in 1956 the average f.o.b. price from gift stands for custom sales was the lowest of consumer packs, 13.5 cents per pound. The highest average price received in 1956 for consumer packs was 30.3 cents from packers' delivered sales to other honey packers. For bulk in that year, f.o.b. prices ranged from a low of 12.0 cents per pound delivered to other honey packers, to 20.1 cents f.o.b. pickup to independents.

FOB prices received per pound of the important varieties of filtered and unfiltered honey by type of sale are given in Tables 67 to 70 in Appendix 4. Orange Blossom Comb commanded the highest prices throughout for all types of sales in filtered and unfiltered, in 1955 and 1956. This was followed by successively lower prices for Orange Blossom strained, then Light Amber, and finally Amber honey. On average, f.o.b. prices received were higher throughout for filtered

Table 20.--All honey, 1955--average f.o.b. price received per pound
by 9 packers by type of sale and buyer

Type of sale	Buyers						
	Whole- sellers	Chains	Co-ops	Gift stands	Inde- pendents	Honey packers	Candy Bakers makers Others

^aDirect sales by packer.

^bSales arranged by broker.

^cRefunds are deducted.

Table 21.--All honey, 1956--average f.o.b. price received per pound
by 9 packers by type of sale and buyer

Type of sale	Whole- sellers	Chains	Co-ops	Buyers				Candy makers	Others	
				Gift stands	Inde- pendents	Honey packers	Bakers			
Consumer sizes										
FOB (pickup) ^a	\$0.234	\$0.232	\$0.206	\$0.245	\$0.270	\$0.229	\$0.120	----	\$0.217	
Delivered (packer) ^a	.203	.178	.243	.245	.191	.303	----	----	.212	
Delivered (broker) ^b	.229	.302	.281	.250	.251	----	----	----	----	
Delivered (refund) ^c	----	----	----	.269	----	----	----	----	----	
Consignment (broker) ^b	.224	----	.250	----	.202	----	----	----	----	
Custom pack ^a	.168	----	----	.135	.250	----	----	----	----	
All types of sales	\$0.220	\$0.214	\$0.215	\$0.242	\$0.198	\$0.238	\$0.120	----	\$0.215	
Bulk sizes										
FOB (pickup) ^a	\$0.144	----	----	\$0.134	\$0.201	\$0.137	\$0.136	\$0.144	\$0.146	
Delivered (packer) ^a	.130	----	----	.136	----	.120	.130	----	.134	
Delivered (broker) ^b	.173	----	----	----	----	.173	.144	----	.167	
Delivered (refund) ^c	----	----	----	----	----	----	----	----	----	
Consignment	----	----	----	----	----	----	----	----	----	
Custom pack ^a	.160	----	----	----	.121	----	----	----	----	
All types of sales	\$0.142	----	----	\$0.135	\$0.199	\$0.133	\$0.137	\$0.144	\$0.136	
All sales	\$0.167	\$0.214	\$0.215	\$0.240	\$0.198	\$0.136	\$0.136	\$0.144	\$0.152	

^aDirect sales by packer.

^bSales arranged by broker.

^cRefunds are deducted.

over unfiltered varieties, and similarly the prices received were higher in the year 1956 than in 1955.

Discounts on Sales

The purpose of this section is to evaluate the importance of the various rates of discounts granted (as represented by 9 firms). In the two-year period studied, it was ascertained that packers had granted an array of twenty different discounts (Tables 22 to 25). In addition, there were sales on which no discounts were taken, and some in which errors on the invoices (from which study data were obtained) made it impossible to determine a rate of discount in whole numbers. These two categories were listed as "none" and "other" in the tables.

The most used discount rates, and the categories in which the largest volumes of honey were sold, were those in which a 1 or 2 per cent discount was granted and taken by purchasers. These were the usual discounts granted when payment was made within 10 days of delivery.

Some packers made it a practice to quote delivered prices to buyers with the stipulation that the buyer would pay the freight charges to the carrier upon delivery of goods. The buyer was then permitted to deduct the freight charges from the delivered price and remit the balance to the packer as payment for goods received. It was at this point that buyers differed in their method of taking the discount for payment within ten days of delivery. Some buyers took a discount on the full delivered price. Others took the discount on the balance due the packer after the freight allowance was deducted.

Table 22.--All filtered honey, 1955--volumes and per cent of total sold by 9 packers relative to discounts granted to buyers

Per cent discount	No. of lots	Volume sold lbs	Average volume per lot lbs	Per cent of total ^b
<u>Consumer sizes</u>				
None	2,654	149,571	56	5.9
1.0	1,691	673,175	398	26.6
1.0*	89	31,686	356	1.3
2.0	1,182	167,564	142	6.6
2.0*	2	480	240	a
3.0	6	546	91	a
4.0	7	2,280	326	.1
5.0	37	8,880	240	.4
8.5	2	360	180	a
5.0 and 1.0*	5	3,420	684	0.1
10.0	163	27,860	171	1.1
10.0 and 1.0*	8	4,044	506	.2
Other	102	11,124	109	.4
Total	5,948	1,080,990	182	42.7
<u>Bulk sizes</u>				
None	75	439,746	5,863	17.4
1.0	38	31,980	842	1.3
1.0*	15	7,020	468	.2
Other	3	1,440	480	.1
Total	131	480,186	3,055	19.0
All sizes	6,079	1,561,176	257	61.7

*Discount was taken after freight charges were deducted from delivered price.

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 23 to equal 100 per cent.

Table 23.--All unfiltered honey, 1955--volumes and per cent of total sold by 9 packers relative to discounts granted to buyers

Per cent discount	No. of lots	Volume sold lbs	Average volume per lot lbs	Per cent of total ^b
<u>Consumer sizes</u>				
None	1,539	73,346	48	2.9
1.0	2	235	118	a
2.0	44	3,446	78	.1
5.0	13	456	35	a
20.0	10	8,460	846	.3
5.0 and 1.0	3	444	148	a
5.0 and 2.0	58	1,314	23	.1
10.0	15	396	26	a
10.0 and 2.0	99	4,134	42	.2
15.0	20	9,276	464	.4
15.0 and 1.0	2	750	375	a
15.0 and 2.0	68	31,188	459	1.3
20.0 and 1.0	<u>107</u>	<u>70,464</u>	<u>659</u>	<u>2.8</u>
Total	1,980	203,909	103	8.1
<u>Bulk sizes</u>				
None	250	699,382	2,798	27.6
2.0	<u>14</u>	<u>67,260</u>	<u>4,256</u>	<u>2.6</u>
Total	264	766,642	2,904	30.2
All sizes	2,244	970,551	433	38.3
All honey	8,323	2,531,727	304	100.0

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 22 to equal 100 per cent.

Table 24.--All filtered honey, 1956--volumes and per cent of total sold by 9 packers relative to discounts granted to buyers

Per cent discount	No. of lots	Volume sold lbs	Average volume per lot lbs	Per cent of total ^b
<u>Consumer sizes</u>				
None	2,655	172,554	65	7.3
1.0	1,269	502,641	396	21.3
1.0*	45	12,408	276	.5
1.5	3	78	26	a
2.0	825	162,526	197	6.9
2.0	1	360	360	a
3.0	6	1,301	217	.1
4.0	16	3,876	242	.2
5.0	38	9,596	253	.4
5.0 and 1.0*	2	3,000	1,500	.1
10.0	14	5,400	386	.2
10.0 and 1.0	86	23,977	279	1.0
Other	98	6,466	66	.3
Total	5,058	904,183	179	38.3
<u>Bulk sizes</u>				
None	41	58,131	1,418	2.5
1.0	19	5,785	302	.2
1.0*	10	3,060	306	.1
5.0 and 1.0	10	5,280	528	.2
Other	4	40,043	10,011	1.7
Total	84	112,299	1,337	4.7
All sizes	5,142	1,016,482	198	43.0

*Discount was taken after freight charges were deducted from delivered price.

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 25 to equal 100 per cent.

Table 25.--All unfiltered honey, 1956--volumes and per cent of total sold by 9 packers relative to discounts granted to buyers

Per cent discount	No. of lots	Volume sold lbs	Average volume per lot lbs	Per cent of total ^b
<u>Consumer sizes</u>				
None	1,508	153,008	101	6.5
1.0	1	60	60	a
2.0	38	4,945	130	.2
5.0	4	84	21	a
20.0	4	1,200	300	a
5.0 and 1.0	3	216	72	a
5.0 and 2.0	8	174	22	a
10.0	23	708	31	a
10.0 and 2.0	121	4,350	36	.2
15.0	34	9,324	274	.4
15.0 and 1.0	2	750	375	a
15.0 and 2.0	86	39,306	457	1.7
20.0 and 1.0	149	96,036	645	4.1
Total	1,981	310,161	157	13.1
<u>Bulk sizes</u>				
None	227	980,851	4,321	41.5
1.0	1	360	360	a
2.0	13	57,000	4,385	2.4
Total	241	1,038,211	4,308	43.9
All sizes	2,222	1,348,372	607	57.0
All honey	7,364	2,364,854	321	100.0

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 24 to equal 100 per cent.

In 1955, a 1.0 per cent discount was taken on 27.9 per cent of the total volume of all honey sold in all sizes of pack. For 1956 the percentage was 21.5. A 2.0 per cent discount was taken on 9.3 per cent of the total in 1955, and 9.5 per cent in 1956.

Discounts were not granted, or taken on 53.8 per cent of all honey sold in 1955, and on 57.8 per cent in 1956.

Sales at the extremely large discounts of 10.0, 15.0, and 20.0 per cent accounted for a rather small proportion of the total volume of honey sold. Such sales were not a form of price discrimination as might be expected. These discounts were granted to purchasers for three reasons: (1) if buyers picked up their shipments at the honey plants, thereby eliminating transportation costs of the packer, (2) on the basis of savings in handling and preparation resulting from single large volume shipments, in contrast to numerous small shipments to any one customer, and (3) a combination of reasons 1 and 2.

Packers who used the method of selling in which large discounts were granted were in the minority. The few who did use it set up basic price schedules to cover costs of handling, packing and transportation to all important points within their marketing area. Then, discounts were granted based upon the three reasons cited above. This method of selling was more complex, and resulted in additional bookkeeping. In the majority of sales, packers used the much simpler method of establishing basic f.o.b. price schedules with costs of selling and transportation added to the basic f.o.b. prices. In some instances the schedule of prices was subdivided on the basis of specific volumes purchased. Those who did this reasoned that costs of handling and

packing decrease with increased volumes of output, as fixed costs are spread over a greater number of units produced.

Table 26 shows the volume percentages of all honey sold in 1956 at various discount rates to different types of buyers. In the small consumer sizes, wholesalers and chain stores purchased one half to two thirds of all honey at a 1.0 per cent discount rate. Other types of buyers purchased most of their honey without receiving any discount. Also, most of the bulk honey was sold without a discount. A similar table for 1955 is in Appendix 4 (Table 71).

Total discounts granted and taken in 1955 amounted to \$8,936.28, which was 2.0 per cent of the total delivered value of all sales amounting to \$457,261.21. In 1956, the total value of discounts was \$10,014.18, or 1.8 per cent of the \$545,418.30 delivered sales total.

Brokers' Sales

In order that packers may be further guided in developing a more orderly and efficient distribution program for Florida-produced honey, it is important to review, lastly, that phase of the selling process which was accomplished with the aid and cooperation of food brokers. This can best be presented by a discussion of the volumes of honey sold at the various rates of commission paid for brokers' services.

Honey packers have been able to function successfully as their own salesmen within local areas and within short distances from their packing plants in Florida. However, in order to sell at more distant markets in other states, they have found it more practical to use the services of food brokers. These brokers were (and are) more familiar

Table 26.--All honey, 1956--per cent of total volume sold relative to rate of discount and type of buyer, 9 packers

Per cent discount	Whole-salers	Chains	Co-ops	Gift stands	Buyers				Bakers	Candy makers	Others
					Inde-pendents	Honey packers	Consumer sizes				
None	2.3	1.2	---	7.6	2.9	0.4			0.3	---	0.2
1.0	5.0	15.4	0.2	.2	.4	---			---	---	a
1.0* to 1.5	.5	---	---	a	a	---			---	---	---
2.0 to 2.0*	1.3	2.8	---	2.1	.9	---			---	---	---
3.0 to 4.0	.2	---	---	a	a	.1			---	---	---
5.0	.1	---	---	.3	a	---			---	---	---
5.0 and 1.0 to 8.5	.1	---	---	a	a	---			---	---	---
10.0	---	a	---	.3	a	---			---	---	---
10.0 and 1.0 to 10.0 and 2.0	---	.1	---	1.0	a	---			---	---	---
15.0 and 1.0 to 15.0 and 2.0	.7	1.0	---	.2	.2	---			---	---	a
20.0 to 20.0 and 1.0	.3	3.0	.8	a	---	---			---	---	---
Other	.1	---	a	.1	---	---			---	---	---
Total	10.6	22.5	1.0	11.8	4.4	0.5			0.3	---	0.2
Bulk sizes											
None	19.1	---	---	0.2	0.1	16.7			7.2	a	0.8
1.0 to 1.0*	.2	---	---	---	a	a			.1	---	a
2.0 to 5.0 and 1.0	2.4	---	---	---	---	.2			---	---	---
Other	a	---	---	---	---	a			1.7	---	---
Total	21.7	---	---	0.2	0.1	16.9			9.0	a	0.8
All sizes	32.3	22.5	1.0	12.0	4.5	17.4			9.3	a	1.0

*Discount was taken after freight charges were deducted from delivered price.

a Less than 0.05 per cent.

with market conditions for honey in their own specific areas of operation. They know the immediate competitive prices of honey produced there, and of that shipped into their market areas from other states.

Volumes sold

Firm's direct sales (not through brokers) amounted to 2,236,971 pounds of honey, or 88.3 per cent of all honey sold in 1955. Brokers sold, on commission, 294,756 pounds in that period, or the remaining 11.7 per cent of the total. The volume of direct sales for 1956 was 2,163,123 pounds, or 91.5 per cent of the total, and brokers, in that period, sold 201,731 pounds, 8.5 per cent of the total. The amounts handled by brokers include consignment sales since commissions were paid on those also.

The decrease in the percentage of brokers' sales from 11.7 per cent in 1955 to 8.5 per cent of the total in 1956 was due to an extremely large reduction in total sales of one of the 9 packers who had sold and shipped large quantities of honey through brokers to out-of-state markets in the earlier year.

Sales volume for brokers sales at various commission rates are shown in Tables 27 and 28. No honey of the unfiltered type was sold by brokers. Of the filtered honey they handled, the largest volume sold was at the 5.0 per cent commission rate. For consumer sizes and bulk honey combined, the volume sold at this rate totaled 226,260 pounds in 1955, which was 9.0 per cent of all sales and 76.8 per cent of all brokers' sales. Honey sold on a 6.0 per cent commission basis accounted for 2.1 per cent of total sales in that period, or 17.9 per cent of all brokers' sales.

Table 27.--All honey, 1955--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. price received per pound by 9 packers from firms' direct sales and sales through brokers at various commission rates

Per cent commission	No. of lots	Volume lbs	Average volume per lot lbs	Per cent of total volume	Total f.o.b. return	Average f.o.b. price per lb
<u>Filtered consumer sizes</u>						
Firms' sales ^a	4,822	822,661	171	32.5	\$176,252	\$0.214
3.0	1	480	480	b	130	0.271
4.0	2	1,020	510	b	313	.307
4.5	41	12,318	300	.4	2,903	.236
5.0	626	189,833	303	7.5	43,444	.229
6.0	289	53,010	183	2.1	12,119	.229
10.0	19	828	44	b	204	.246
20.0	12	840	70	b	189	.225
Brokers' sales	990	258,329	261	10.2	59,302	0.230
Total	5,812	1,080,990	186	42.7	\$235,554	\$0.218
<u>Filtered bulk sizes</u>						
Firms' sales ^a	81	443,759	5,479	17.5	\$ 56,584	\$0.128
5.0	---	36,427	729	1.5	5,333	0.146
Brokers' sales	50	36,427	729	1.5	5,333	0.146
Total	131	480,186	3,666	19.0	\$ 61,917	\$0.129
<u>Unfiltered consumer sizes</u>						
Firm's sales ^a	1,956	203,909	104	8.1	\$ 36,017	\$0.177
<u>Unfiltered bulk sizes</u>						
Firms' sales ^a	264	766,642	2,903	30.2	\$ 94,558	\$0.123
All honey	8,163	2,531,727	310	100.0	\$428,046	\$0.169

^aFirm' direct sales (no commission paid).

^bLess than 0.05 per cent.

Table 28.--All honey, 1956--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. price received per pound by 9 packers from firms' direct sales and sales through brokers at various commission rates

Per cent commission	No. of lots	Volume lbs	Average volume per lot lbs	Per cent of total volume	Total f.o.b. return	Average f.o.b. price per lb
<u>Filtered consumer sizes</u>						
Firms' sales ^a	4,351	749,695	172	31.7	\$169,989	\$0.227
3.0	1	9,750	9,750	0.4	1,584	0.162
5.0	387	99,444	257	4.2	24,906	.250
6.0	237	42,762	180	1.8	10,438	.244
10.0	36	2,532	70	.1	609	.241
Brokers' sales	661	154,488	234	6.5	37,537	0.243
Total	5,012	904,183	180	38.2	\$207,526	\$0.230
<u>Filtered bulk sizes</u>						
Firms' sales ^a	54	65,056	1,205	2.8	\$ 10,331	\$0.159
3.0	2	39,143	19,572	1.7	5,527	0.141
5.0	27	7,800	289	.3	1,364	.175
6.0	1	300	300	b	48	.160
Brokers' sales	30	47,243	1,575	2.0	6,939	0.146
Total	84	112,299	1,337	4.8	17,270	\$0.154
<u>Unfiltered consumer sizes</u>						
Firms' sales ^a	1,953	310,161	159	13.1	\$ 59,284	\$0.191
<u>Unfiltered bulk sizes</u>						
Firms' sales ^a	241	1,038,211	4,308	43.9	\$141,153	\$0.136
All honey	7,290	2,364,854	324	100.0	\$425,233	\$0.180

^aFirms' direct sales (no commission paid).

^bLess than 0.05 per cent.

The corresponding percentages for the 1956 season were 4.5 of the total volume at the 5.0 per cent rate of commission and 1.8 at the 6.0 per cent rate. The proportionate share of all brokers' sales which was sold at the 5.0 per cent rate dropped from 76.8 per cent in 1955 to 52.9 per cent in 1956. This was due to the decreased sales of one packer, as previously discussed. The proportionate share of brokers' sales which was sold at the 6.0 per cent rate increased from 17.9 to 21.1 per cent in the latter year.

FOB prices received and brokerage fees

The average f.o.b prices received per pound of all types of honey combined, sold by brokers, compared very favorably with the prices received on packers' direct sales to customers (Tables 27 and 28). At every rate of commission, the average price received per pound was higher for brokers' sales than for packers' direct sales, with the exception of those at the 3.0 per cent rate in 1956, in both consumer sizes and bulk sizes. There was only a very small amount sold at this rate. However, as previously qualified, the above prices do not necessarily imply higher net prices for honey, but a larger proportionate share of sales of the higher priced packs such as comb.

Tables 29 and 30 show the proportionate volumes of sales to types of buyers at various brokers' commission rates in 1955 and 1956. These tables also show packers' direct sales for the purpose of comparison with sales through brokers. As noted above, the largest volume of brokers' sales was at the 5.0 per cent commission rate and this was sold mainly to wholesalers, with some sales to chains and independents.

Table 29.--All honey, 1955--per cent of total volume sold at various brokers' commission rates to type of buyer

Per cent commission	Buyers								
	Whole- sellers	Chains	Co-ops	Gift stands	Inde- pendents	Honey packers	Bakers	Candy makers	Others
<u>Consumer sizes</u>									
a	4.4	19.4	0.6	9.8	5.8	0.6	---	---	0.1
3.0	b	---	---	---	---	---	---	---	---
4.0	.1	---	---	---	---	---	---	---	---
4.5	.3	.2	---	---	---	---	---	---	---
5.0	6.0	1.3	b	---	.1	---	b	---	---
6.0	1.7	.2	---	---	.2	---	---	---	---
10.0	---	b	---	---	b	---	---	---	---
20.0	b	---	---	---	b	---	---	---	---
Total	12.5	21.1	0.6	9.8	6.1	0.6	b	---	0.1
<u>Bulk sizes</u>									
a	14.1	b	---	0.4	0.1	19.9	5.8	---	7.4
5.0	.1	---	---	---	---	.6	.8	---	b
Total	14.2	b	---	0.4	0.1	20.5	6.6	---	7.4
All sizes	26.7	21.1	0.6	10.2	6.2	21.1	6.6	---	7.5

^aFirms' direct sales (no commission).

^bLess than 0.05 per cent.

Table 30.---All honey, 1956--per cent of total volume sold at various
brokers' commission rates to type of buyer

Per cent commission	Whole- salers	Chains	Co-ops	Buyers					Others
				Gift stands	Inde- pendents	Honey packers	Bakers	Candy makers	
<u>Consumer sizes</u>									
a	5.5	21.4	1.0	11.8	4.1	0.4	0.3	---	0.2
3.0	.4	---	---	---	---	---	---	---	---
5.0	3.1	.9	b	---	.1	---	---	---	---
6.0	1.6	.2	---	b	.1	---	---	---	---
10.0	b	---	---	---	.1	---	---	---	---
Total	10.6	22.5	1.0	11.8	4.4	0.4	0.3	---	0.2
<u>Bulk sizes</u>									
a	21.6	---	---	0.2	0.1	16.9	7.2	b	0.8
3.0	---	---	---	---	---	---	1.6	---	---
5.0	.1	---	---	---	---	.1	.2	---	b
6.0	---	---	---	---	---	---	---	---	b
Total	21.7	---	---	0.2	0.1	17.0	9.0	b	0.8
All sizes	32.3	22.5	1.0	12.0	4.5	17.4	9.3	b	1.0

^aFirms' direct sales (no commission).

^bLess than 0.05 per cent.

The largest volume of packers' direct sales (no commission to brokers) went to chains, followed by gift stands and independents. Tables 72 and 73 in Appendix 4 are average f.o.b. prices received per pound of all honey combined, at various commission rates within market outlet groups.

A comparison of average f.o.b. prices received per pound of plain Orange Blossom honey sold through brokers at various commission rates, is in Table 31. The highest f.o.b. prices to packers were received on the 5.0 per cent brokers' rate sales in both years studied. The prices received for filtered Orange Blossom honey within this breakdown were higher than for unfiltered Orange Blossom honey throughout the list. As stated previously, brokers did not handle unfiltered brands and all sales of honey in this category were firms' direct sales. Tables 74 and 75 in Appendix 4 summarize a similar breakdown for Orange Blossom comb and Light Amber.

An analysis of brokers' sales would not be complete without some knowledge of the cost of brokerage fees. Those items of consumer-size packs for which all sales exceeded 20,000 pounds in either 1955 or 1956 were tabulated to show brokerage costs (Tables 32 and 33). Average f.o.b. prices and net returns per pound received by packers were also calculated for these specific items sold through brokers.

The range in brokerage fees for 1955 was from 0.9 of a cent per pound paid on the 12/5-lb Round Jar of Light Amber honey to 1.9 cents per pound on the 12/1-lb Server of Orange Blossom (a reflection of this high-priced item). The f.o.b. price per pound was highest, 32.1 cents, for the 12/1-lb Server of Orange Blossom, again reflecting the high cost container required to pack this item.

Table 31.--Orange Blossom honey, 1955 and 1956--filtered versus unfiltered--comparison of average f.o.b. price per pound received by 9 packers relative to brokers' commission and direct sales by firms

Per cent commission	1955		1956	
	Filtered	Unfiltered	Filtered	Unfiltered
<u>Consumer sizes</u>				
Firms' direct sales (no commission)	\$0.214	\$0.183	\$0.231	\$0.198
4.5	.209	-----	-----	-----
5.0	.240	-----	.262	-----
6.0	.218	-----	.237	-----
10.0	.230	-----	.230	-----
20.0	.208	-----	-----	-----
Average brokers' sales	\$0.234	-----	\$0.256	-----
<u>Bulk sizes</u>				
Firms' direct sales (no commission)	\$0.145	\$0.135	\$0.190	\$0.146
5.0	.162	-----	-----	-----

Table 32.--Important types and packs of filtered honey, 1955--volumes sold through brokers, average commission, average f.o.b. prices and average net return received per pound by 2 packers

Honey type and pack size	Volume sold by brokers (lbs)	Average commission paid per lb	Average f.o.b. price per lb	Average net return per lb
<u>Consumer sizes</u>				
<u>OB</u>				
24/8-oz Q	2,244	\$0.017	\$0.255	\$0.110
12/1-lb Sv	20,748	.019	.321	.104
24/1-lb FB	6,864	.014	.209	.079
24/1-lb Q	24,336	.013	.211	.121
12/2-lb Q	6,552	.013	.195	.122
6/5-lb RJ	10,260	.010	.172	.138
12/5-lb Tin	120	.017	.162	.112
<u>LA</u>				
24/8-oz Q	696	.014	.232	.087
24/1-lb Q	10,848	.011	.186	.096
6/5-lb RJ	28,590	.009	.157	.123
12/5-lb Tin	8,220	.010	.167	.117
<u>OBC</u>				
24/1-lb FB	18,504	.016	.261	.138
24/1-lb Q	10,080	.017	.265	.151
24/1-lb Tumb	26,472	.016	.260	.126
12/2-lb Q	31,464	.015	.247	.154
12/2 1/2-lb Sq	12,000	.014	.242	.145

Table 33.--Important types and packs of filtered honey, 1956--volumes sold through brokers, average commission, average f.o.b. prices and average net return received per pound by 2 packers

Honey type and pack size	Volume sold by brokers (lbs)	Average commission paid per lb	Average f.o.b. price per lb	Average net return per lb
<u>Consumer sizes</u>				
<u>OB</u>				
24/8-oz Q	1,764	\$0.021	\$0.276	\$0.112
12/1-1b Sv	12,144	.020	.346	.117
24/1-1b FB	2,568	.016	.229	.103
24/1-1b Q	14,436	.015	.227	.127
12/2-1b Q	7,488	.014	.209	.133
6/5-1b RJ	5,520	.011	.186	.147
12/5-1b Tin	780	.014	.185	.135
<u>LA</u>				
24/8-oz Q	2,764	.015	.253	.089
24/1-1b Q	21,864	.014	.215	.115
6/5-1b RJ	9,150	.011	.169	.130
12/5-1b Tin	1,080	.011	.173	.123
<u>OBC</u>				
24/1-1b FB	4,656	.019	.292	.158
24/1-1b Q	2,400	.019	.294	.188
24/1-1b Tumb	4,776	.019	.271	.107
12/2-1b Q	4,656	.018	.275	.190
12/2 1/2-1b Sq	510	.015	.253	.160

The Orange Blossom Comb packs, as a group, all had higher f.o.b. prices and reflected the additional costs of labor in preparing comb packs, as well as the higher cost of raw comb honey.

In 1956, the minimum brokerage fee was 1.1 cents per pound for 3 of the 5-lb packs and the maximum fee was 2.1 cents on the 24/8-oz Q (ovaline) jars of Orange Blossom. The average f.o.b. price experience for 1956 followed the pattern of 1955. They were highest for the one-pound server and the group of comb packs.

Net prices received

The average net returns from brokers' sales (which exclude the costs of packing and distribution) are shown in the last column of the same tables. These figures show that for 1955 and 1956 the highest returns for filtered Orange Blossom honey was from the 6/5-lb Round Jar, being 13.8 cents and 14.7 cents respectively per pound. The 12/1-lb Server of Orange Blossom had the highest f.o.b. price per pound, but the net return of 10.4 cents per pound in 1955 was next to the lowest of the group. The lowest net return was 7.9 cents for the 24/1-lb Fish Bowls in that year. In 1956, the 24/1-lb Fish Bowl again returned the lowest net of 10.3 cents, followed by the 24/8-oz Q jar at 11.2 cents and then the 24/1-lb Server at 11.7 cents per pound.

In both years the 6/5-lb Round Jar and the 12/5-lb Tin gave the highest net per pound in the group of Light Amber packs and also exceeded net returns on some of the Orange Blossom packs.

Among the comb packs of Orange Blossom, the highest net returns were received from sales of the 24/1-lb Q jar and the 12/2-lb Q jar in

both years. The lowest net return in the comb group was for the 24/1-lb Tumbler.

Summary of Packing Costs and Average Net Returns
for All Honey Items Sold by Nine Packers

Average net returns to honey packers for specific items were reviewed in earlier discussions in this chapter. However, the previous discussions centered around only 19 specific honey items which had total sales of 20,000 pounds or more for all 9 packers combined in 1955 or 1956.

Since the subject of costs and returns has been introduced, this chapter would not be complete without a summary of the costs and returns for all items sold. This seems advisable because some packers, individually, may have large sales of certain items which were not included in the group of 19 items already discussed.

Therefore, Table 34 was prepared for 1956 and Table 76 in Appendix 4 for 1955. These tables list the average f.o.b. price received per pound of every item of honey packed by the nine packers, the average cost of packing, and the average net return after packing and distribution costs were deducted from the delivered price. Filtered and unfiltered honey were listed separately for comparative purposes.

The average net returns should be of particular interest and concern to honey packers because it was found that there were losses on some items. In 1956, there were losses on the 12/8-oz Ceramic Pottery, and the 12/1-lb Jug of filtered Orange Blossom. In the unfiltered

Table 34.--All honey, 1956, average f.o.b. price, average cost of packing and average net returns received by 9 packers per pound, listed by type and pack size--filtered versus unfiltered

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
Consumer sizes						
OB						
12/3-oz Grate	\$1.133	\$0.449	\$0.684	\$	\$	\$
48/3-oz Bb1	.489	.342	.147	---	---	---
48/3-oz EE	.445	.329	.116	.379	.556	-.177
12/4-oz CPot	.404	.262	.142	---	---	---
12/8-oz Jug	1.192	.892	.300	---	---	---
12/8-oz PFPit	2.003	1.937	.066	---	---	---
12/8-oz CPot	.254	.333	-.079	---	---	---
12/8-oz SP	.587	.424	.163	---	---	---
12/8-oz SvSt	.901	.427	.474	---	---	---
24/8-oz Q	.280	.164	.116	.273	.175	.098
24/8-oz FB	.295	.177	.118	.253	.191	.062
24/8-oz Sv	.520	.361	.159	---	---	---
24/14-oz OJ	.246	.143	.103	---	---	---
12/1-lb Sv	.351	.229	.122	.353	.390	-.027
12/1-lb Sv/WC	.229	.110	.119	---	---	---
12/1-lb Jug	.584	.642	-.058	---	---	---
12/1-lb Crk	.636	.484	.152	---	---	---
12/1-lb SHPit	1.161	.956	.205	---	---	---
24/1-lb Q	.237	.100	.137	---	---	---
24/1-lb FB	.238	.126	.112	.228	.104	.124
24/1-lb Beehv	.569	.465	.104	.216	.104	.112
24/1-lb BBHV	---	---	---	.990	.677	.313
24/1-lb OBHV	.495	.448	.046	---	---	---
24/1-lb Cat	---	---	---	.220	.046	.174

Table 34.--Continued

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
<u>OB</u>						
12/2-lb Q	\$0.223	\$0.076	\$0.147	\$0.202	\$0.075	\$0.127
12/2-lb FB	.222	.097	.125	----	----	----
12/2-1/2-lb Sq	.218	.086	.132	.190	.071	.119
12/2 1/2-lb Tin	----	----	----	.169	.055	.114
24/2 1/2-lb Tin	.219	.063	.156	.177	.063	.114
12/3-lb STin	.140	.025	.115	----	----	----
6 1/4 1/4-lb RJ	.180	.043	.137	----	----	----
6/5-lb RJ	.200	.039	.161	.175	.048	.127
6/5-lb Sq	.205	.062	.143	.176	.060	.116
12/5-lb Tin	.179	.050	.129	.185	.052	.133
12/5-lb MTin	.226	.085	.141	.203	.103	.100
6/9-lb STin	.130	.025	.105	----	----	----
6/10-lb Tin	----	----	----	.185	.044	.141
<u>Bulk sizes</u>						
<u>OB</u>						
1/12-lb MJ	\$0.139	\$0.025	\$0.114	\$0.242	\$0.019	\$0.223
1/60-lb Can	.189	.022	.167	.154	.026	.128
1/680-lb Drum	.220	.005	.215	.136	.006	.130
<u>Consumer sizes</u>						
<u>1A</u>						
24/8-oz Q	\$0.262	\$0.164	\$0.098	\$0.264	\$0.175	\$0.089
12/1-lb Sv	.523	.229	.094	.378	.380	-.002
24/1-lb Q	.214	.100	.114	.203	.104	.099
12/2-lb Q	.196	.076	.120	.196	.075	.119

Table 34.--Continued

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
<u>1A</u>						
12/2 1/2-lb Sq	\$ ----	\$ ----	\$ ----	\$0.186	\$0.071	\$0.115
6/4 1/4-lb RJ	.123	.043	.080	----	----	----
6/5-lb RJ	.180	.039	.141	----	----	----
6/5-lb Sq	----	----	----	.139	.060	.079
6/5-lb Tin	----	----	----	.170	.047	.123
12/5-lb Tin	.150	.050	.100	.166	.052	.114
12/5-lb MTin	.244	.085	.159	----	----	----
<u>1A</u>						
1/80-lb Can	\$0.172	\$0.022	\$0.150	\$0.143	\$0.026	\$0.117
1/650-lb Drum	.139	.005	.134	.137	.006	.131
<u>A</u>						
12/4 1/2-lb Tin	\$0.156	\$0.045	\$0.109	\$ ----	\$ ----	\$ ----
6/5-lb Tin	----	----	----	.158	.047	.111
12/5-lb Tin	----	----	----	.155	.052	.103
<u>A</u>						
1/80-lb Can	\$0.180	\$0.022	\$0.158	\$0.128	\$0.026	\$0.102
1/650-lb Drum	.127	.005	.122	.118	.006	.112
<u>DA</u>						
1/650-lb Drum	\$ ----	\$ ----	\$ ----	\$0.105	\$0.006	\$0.099

Table 34.--Continued

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
<u>Consumer sizes</u>						
<u>Tu</u>						
24/8-oz FB	\$0.330	\$0.177	\$0.153	\$	\$	\$
24/1-lb Q	.288	.100	.188	.359	.104	.255
24/1-lb FB	.325	.126	.199	---	---	---
12/2-lb Q	.269	.076	.193	.271	.075	.196
24/2 1/2-lb Tin	.288	.063	.225	---	---	---
6/5-lb RJ	.300	.039	.261	---	---	---
6/5-lb Tin	---	---	---	.242	.047	.195
12/5-lb Tin	.272	.050	.222	.246	.052	.194
12/5-lb M Tin	.340	.085	.255	---	---	---
<u>Bulk sizes</u>						
<u>Tu</u>						
1/60-lb Can	\$0.238	\$0.022	\$0.216	\$0.200	\$0.026	\$0.174
1/650-lb Drum	---	---	---	.200	.006	.194
<u>Consumer sizes</u>						
<u>OBC</u>						
12/8-oz Plas	\$0.432	\$0.264	\$0.168	\$	\$	\$
24/8-oz FB	.383	.193	.190	---	---	---
24/14-oz OJ	.356	.184	.172	---	---	---
24/1-lb Q	.292	.106	.186	.257	.114	.143
24/1-lb FB	.281	.134	.147	---	---	---
24/1-lb Tumb	.287	.164	.123	.298	.207	.091
12/21-oz Plas	.447	.207	.240	---	---	---
12/2-lb Q	.274	.085	.189	---	---	---
12/2-lb FB	.238	.140	.098	---	---	---
12/2 1/2-lb Sq	.299	.137	.162	.266	.125	.141
6/5-lb Sq	.493	.155	.338	.244	.191	.053

Table 34.--Continued

Honey type and pack size	Filtered		Unfiltered			
	Average f.o.b price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
<u>Bulk sizes</u>						
<u>OBC</u>						
1/30-lb Super	\$0.235	\$0.001	\$0.234	\$0.190	\$0.001	\$0.189
<u>Consumer size only</u>						
<u>LAC</u>						
24/1-lb Q	\$0.281	\$0.106	\$0.175	\$ ----	\$ ----	\$ ----
24/1-lb Tumb	.291	.164	.127	----	----	----
24/1-lb Modrm	----	----	----	.286	.120	.166
12/2-lb Q	.260	.085	.175	----	----	----
12/2 1/2-lb Sq	.278	.137	.141	.254	.125	.129
<u>Consumer size only</u>						
<u>OB&EO</u>						
24/8-oz Q	\$ ----	\$ ----	\$ ----	\$0.424	\$0.393	\$0.031
24/8-oz FB	.538	.330	.208	----	----	----
<u>Consumer size only</u>						
<u>OBSp</u>						
24/1-lb FB	\$0.320	\$0.126	\$0.194	\$ ----	\$ ----	\$ ----
<u>Bulk size only</u>						
<u>CLV</u>						
1/650-lb Drum	\$ ----	\$ ----	\$ ----	\$ 0.120	\$ 0.006	\$0.114

Orange Blossom packs, losses occurred on the 48/3-oz Elephant Ear jars and the 12/1-lb Servers.

Another point of importance was that average net returns for honey on some items was less than the then current prices of raw honey bought from beekeepers. The range of prices for the principal varieties of raw honey purchased by packers from beekeepers in 1956 were: Orange Blossom, 13-14 cents per pound; Light Amber, 11-13 cents; Amber, 12-13 cents; Orange Blossom Comb, 20-22 cents. In 1955, prices for raw honey were one half to one cent lower.

Although the cost of packing and distributing some items were not covered by returns, packers could continue operating if the losses were offset by higher returns on other items packed. Also, some packers, who produce their own supplies of raw honey, may have been willing to accept lower net prices for honey than the then current prices for raw honey if the costs of producing it were recovered.

CHAPTER V

DISTRIBUTION TO TYPES OF BUYERS, MARKET AREAS AND BY SEASONS

Introduction

In Chapter IV, sales of Florida honey were discussed in relation to types of sales, discounts allowed customers, and brokers' commission rates. It is the purpose of Chapter V to show sales in respect to distribution to types of buyers, market areas, and seasons.

A unique characteristic of marketing Florida honey is that packers can easily bypass wholesale distributors and sell directly to retailers who are located or operate within a short distance of their packing plants. These include many gift stands, independent food stores, corporate chains and cooperative chains.

Distribution of Sales to Buyers

Volumes sold to various types of buyers

The largest volumes of consumer-size packs were sold to chain stores. These amounted to 532,168 pounds in 1955 and 532,307 pounds in 1956, which were 21.1 per cent and 22.6 per cent respectively of the total sales for 2 years (Tables 35 to 38). Wholesalers ranked second in volume taken of consumer packs in 1955, buying 12.5 per cent of the total, and third in 1956 with 10.6 per cent of the total. Gift stands alternated with wholesalers in volume importance, being third in 1955 and second in 1956. In 1955, 249,554 pounds, or 9.8 per cent

Table 35.--All filtered honey, 1955--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. prices received per pound by 9 packers relative to type of buyer

Outlet (buyer)	No. of lots	Volume (lbs)	Average volume per lot (lbs)	Per cent of total volume sold ^b	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
Wholesalers	979	277,528	283	11.0	\$ 60,157	\$0.217
Chains	678	447,473	660	17.7	96,823	.216
Co-ops	41	3,366	82	.1	843	.250
Gift stands	3,539	193,188	55	7.6	46,003	.238
Independents	431	144,113	334	5.7	27,903	.194
Honey packers	40	12,321	308	.5	3,113	.253
Bakers	2	900	450	a	153	.170
Others	102	2,101	21	.1	559	.266
Total	5,812	1,080,990	186	42.7	\$235,554	\$0.218
<u>Bulk sizes</u>						
Wholesalers	16	8,760	548	0.3	\$ 1,488	\$0.170
Honey packers	50	334,366	6,687	13.2	42,996	.129
Bakers	38	19,327	509	.8	2,806	.145
Candy makers	--	-----	---	---	-----	----
Gift stands	--	-----	---	---	-----	----
Independents	16	1,800	113	.1	314	.174
Others	11	115,933	10,539	4.6	14,313	.123
Total	131	480,186	3,666	19.0	\$ 61,917	\$0.129
All sizes	5,943	1,561,176	263	61.7	\$297,471	\$0.191

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 36 to equal 100 per cent.

Table 36.--All unfiltered honey, 1955--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. prices received per pound by 9 packers relative to type of buyer

Outlet (buyer)	No. of lots	Volume (lbs)	Average volume per lot (lbs)	Per cent of total volume sold ^b	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
Wholesalers	105	37,860	361	1.5	\$ 7,031	\$0.186
Chains	397	84,695	213	3.4	13,600	.161
Co-ops	58	13,824	238	.5	2,626	.190
Gift stands	1,150	56,366	49	2.2	10,537	.187
Independents	236	8,761	37	.3	1,775	.203
Honey packers	1	1,320	1,320	.1	242	.183
Bakers	---	---	---	---	---	---
Others	9	1,083	120	.1	206	.190
Total	1,956	203,909	104	8.1	\$ 36,017	\$0.177
<u>Bulk sizes</u>						
Wholesalers	42	351,592	8,371	13.9	\$ 45,546	\$0.130
Honey packers	23	186,720	8,118	7.4	21,115	.113
Bakers	169	147,960	876	5.8	17,389	.118
Candy makers	---	---	---	---	---	---
Gift stands	18	8,390	466	.3	1,024	.122
Independents	7	804	115	a	105	.131
Others	5	71,176	14,235	2.8	9,379	.132
Total	264	766,642	2,904	30.2	\$ 94,558	\$0.123
All sizes	2,220	970,551	437	38.3	\$130,575	\$0.135
All honey	8,163	2,531,727	310	100.0	\$428,046	\$0.169

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 35 to equal 100 per cent.

Table 37.--All filtered honey, 1956--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. prices received per pound by 9 packers relative to type of buyer

Outlet (buyer)	No. of lots	Volume (lbs)	Average volume per lot (lbs)	Per cent of total volume sold ^b	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
Wholesalers	736	195,993	266	8.3	\$ 43,734	\$0.223
Chains	542	431,375	796	18.3	96,760	.224
Co-ops	32	4,644	145	.2	1,165	.251
Gift stands	3,262	214,836	66	9.1	54,542	.254
Independents	314	36,556	116	1.5	7,371	.202
Honey packers	22	9,690	440	.4	2,308	.238
Bakers	1	7,988	7,988	.3	958	.120
Others	103	3,101	30	.1	688	.222
Total	5,012	904,183	180	38.2	\$207,526	\$0.230
<u>Bulk sizes</u>						
Wholesalers	15	6,597	440	0.3	\$ 1,244	\$0.189
Honey packers	25	24,918	997	1.1	4,644	.186
Bakers	25	61,550	2,462	2.5	8,665	.141
Candy makers	--	-----	---	---	-----	----
Gift stands	1	25	25	a	4	.160
Independents	9	1,225	136	.1	244	.199
Others	9	17,984	1,998	.8	2,469	.137
Total	84	112,299	1,337	4.8	\$ 17,270	\$0.154
All sizes	5,096	1,016,482	199	43.0	\$224,796	\$0.221

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 38 to equal 100 per cent.

Table 38.--All unfiltered honey, 1956--volumes sold, size of average lot, f.o.b. returns, and average f.o.b. prices received per pound by 9 packers relative to type of buyer

Outlet (buyer)	No. of lots	Volume (lbs)	Average volume per lot (lbs)	Per cent of total volume sold ^b	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
Wholesalers	158	53,967	346	2.3	\$ 11,198	\$0.207
Chains	328	100,932	308	4.3	17,262	.171
Co-ops	90	19,686	219	.8	5,924	.199
Gift stands	1,184	64,361	53	2.7	12,944	.201
Independents	166	69,556	419	2.9	13,626	.196
Honey packers	---	-----	---	---	-----	---
Bakers	---	-----	---	---	-----	---
Others	27	1,639	61	.1	330	.201
Total	1,953	310,161	159	13.1	\$ 59,284	\$0.191
<u>Bulk sizes</u>						
Wholesalers	65	505,363	7,775	21.4	\$ 71,230	\$0.141
Honey packers	38	375,324	9,877	15.9	48,605	.130
Bakers	124	151,922	1,225	6.4	20,571	.135
Candy makers	2	960	480	a	138	.144
Gift stands	10	3,938	394	.2	530	.135
Independents	--	-----	---	---	---	---
Others	2	704	352	a	79	.113
Total	241	1,038,211	4,308	43.9	\$141,153	\$0.136
All sizes	2,194	1,348,372	615	57.0	\$200,437	\$0.149
All honey	7,290	2,364,854	324	100.0	\$425,233	\$0.180

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 37 to equal 100 per cent.

of all honey, was sold to gift stands, and in 1956 it was 279,217 pounds, or 11.8 per cent of the total.

Sales of bulk-size packs were spread principally between wholesalers and other honey packers. Other honey packers bought the largest volume in 1955, and wholesalers took the largest volume in 1956.

At the time this study was planned, it was assumed that considerable volumes of honey were sold to candy makers and the data-collection form was prepared with that in mind. However, as is evident from the tables, only two lots, amounting to 960 pounds, were sold in 1956 to candy makers.

The category shown as others included drug companies, chemical companies, restaurants and households.

Volumes of packers' direct sales and sales through brokers to various types of buyers

A comparison of packers' direct sales with sales through brokers to the various types of buyers is shown in Tables 39 and 40. In the consumer-size category, chains purchased the largest volume of packers' direct sales, 488,404 pounds in 1955. Gift stands ranked second in volume of direct sales, independent retailers ranked third, and wholesalers ranked fourth. In consumer-size sales through brokers, wholesalers were the most important type of buyer. Chains also took appreciable amounts of honey in this category.

In bulk-size packs for the same year, packers' direct sales were 47.8 per cent of the total, and sales through brokers accounted for only 1.4 per cent.

Table 39.--All honey, 1955--volume of direct sales and sales through brokers to various types of buyers by 9 packers

Outlet (buyers)	Packers' direct sales		Brokers' sales		Total volume
	Volume (lbs)	Per cent of total sales	Volume (lbs)	Per cent of total sales	
<u>Consumer sizes</u>					
Wholesalers	112,295	4.4	203,093	8.0	315,388
Chains	488,404	19.4	43,764	1.7	532,168
Co-ops	15,702	.6	1,488	.1	17,190
Gift stands	249,554	9.9	-----	---	249,554
Independents	143,790	5.7	9,084	.4	152,874
Honey packers	13,641	.5	-----	---	13,641
Bakers	-----	---	900	a	900
Others	3,184	.1	-----	---	3,184
Total	1,026,570	40.6	258,329	10.2	1,284,899
<u>Bulk sizes</u>					
Wholesalers	358,192	14.1	2,160	0.1	360,352
Honey packers	505,966	20.0	15,120	.6	521,086
Bakers	148,620	5.9	18,667	.7	167,287
Gift stands	8,390	.3	-----	---	8,390
Independents	2,604	.1	-----	---	2,604
Others	186,629	7.4	480	a	187,109
Total	1,210,401	47.8	36,427	1.4	1,246,828
All sizes	2,236,971	88.4	294,756	11.6	2,531,727

^aLess than 0.05 per cent.

Table 40.--All honey, 1956--volume of direct sales and sales through brokers to various types of buyers by 9 packers

Outlet (buyers)	Packers' direct sales		Brokers' sales		Total volume
	Volume (lbs)	Per cent of total sales	Volume (lbs)	Per cent of total sales	
<u>Consumer sizes</u>					
Wholesalers	129,330	5.5	120,630	5.1	249,960
Chains	506,309	21.4	25,998	1.1	532,307
Co-ops	23,790	1.0	540	a	24,330
Gift stands	279,121	11.8	96	a	279,217
Independents	98,888	4.2	7,224	.3	106,112
Honey packers	9,690	.4	-----	---	9,690
Bakers	7,988	.3	-----	---	7,988
Others	4,740	.2	-----	---	4,740
Total	1,059,856	44.8	154,488	6.5	1,214,344
<u>Bulk sizes</u>					
Wholesalers	509,920	21.5	2,040	0.1	511,960
Honey packers	399,042	16.9	1,200	.1	400,242
Bakers	170,069	7.2	43,403	1.8	213,472
Gift stands	3,963	.2	-----	---	3,963
Independents	1,225	.1	-----	---	1,225
Candy makers	960	a	-----	---	960
Others	18,088	.8	600	a	18,688
Total	1,103,267	46.7	47,243	2.0	1,150,510
All sizes	2,163,123	91.5	201,731	8.5	2,364,854

^aLess than 0.05 per cent.

In 1956, distribution of sales between the various buyers was similar to the distribution in 1955 with a small increase in packers' direct sales percentagewise.

Consumer-size packs in greatest demand by important buyers

In order to determine the consumer-size packs which were in greatest demand by types of buyers, Table 41 was prepared for 1955. Similar data for bulk sizes are in Table 42.

The consumer-size packs in greatest demand by wholesalers were (1) 24/1-lb Q (ovaline), (2) 12/2-lb Q (ovaline), (3) 6/5-lb Round Jar, and (4) the 5-lb Tin (6 or 12 to a case). Those in greatest demand by chains were (1) the 24/1-lb Q (ovaline), (2) 24/1-lb Tumbler, (3) 12/4 1/2-lb Tin, and (4) the 5-lb Tin (6 or 12 to a case). Gift stands purchased their largest volumes packed in (1) the 24/1-lb Fish Bowl, (2) 12/2 1/2-lb Square, (3) 24/2 1/2-lb Tin, and (4) the 12/5-lb Tin. Independent retailers favored (1) the 24/8-oz Q (ovaline), (2) 24/1-lb Q (ovaline), (3) 12/2-lb Q (ovaline), and (4) the 12/5-lb Tin.

The two most important types of bulk packs preferred by bulk buyers of strained honey were the 1/60-lb Can and the 1/650-lb Drum. Comb honey in bulk is shipped in supers which is the only practical way. Honey packers prefer to keep the bulk comb for their own packing of small consumer sizes; therefore, sales were small and usually to other honey packers. The one-gallon round jar, holding 12 pounds of honey, was used rarely. Other tables for percentages and volumes for 1955 and 1956 are in Appendix 4 (Tables 77 to 80).

Table 41.--Continued

Type of pack	Pounds sold to						All purchasers
	Whole-salers	Chains	Cooperatives	Gift stands	Independents	Honey packers	
24/1-lb Cat	--	--	--	--	--	--	--
24/1-lb HB	--	--	--	12	--	--	12
24/1-lb Modrn	120	24	--	120	48	--	512
24/1-lb Tumb	26,113	45,672	912	475	1,224	1,584	76,124
12/21-oz Flas	--	--	--	648	--	--	648
12/2-lb Q	42,114	31,968	2,664	9,536	14,616	1,608	102,674
12/2-lb FB	--	--	--	4,260	--	--	4,260
12/2 1/2-lb Sq	14,220	6,923	60	13,930	3,743	4,290	43,284
12/2 1/2-lb Tin	--	--	--	33	--	--	33
24/2 1/2-lb Tin	30	--	--	27,255	435	--	27,220
24/2 1/2-lb Mltin	--	--	--	--	--	--	515
12/3-lb Tin	--	--	--	--	--	--	--
12/3-lb Jug	--	--	--	--	30	--	30
6/4 1/4-lb RJ	1,608	16,910	--	--	1,275	--	19,793
12/4 1/2-lb Mltin	--	--	--	--	--	--	35
12/4 1/2-lb Tin	3,240	54,378	--	54	216	--	57,888
6/5-lb RJ	45,870	36,210	510	3,180	3,490	150	89,330
6/5-lb Sq	330	840	--	5,398	1,140	--	20
6/5-lb Tin	15,660	50,730	5,100	640	1,020	--	73,150
12/5-lb Tin	36,220	44,220	--	113,290	91,480	2,190	291,290
12/5-lb Mltin	--	--	--	385	--	--	690
6/7-lb MJ	--	--	--	7	--	--	7
6/9-lb Tin	--	--	--	--	--	--	--
6/10-lb Tin	--	--	--	140	--	--	140
Total	315,368	532,168	17,190	249,554	152,874	13,641	900 3,184 1,284,899

Table 42.--All bulk honey, 1955--volumes and percentages of bulk-size packs sold to principal buyers by 9 packers

Type of pack	Whole-salers	Gift stands	Honey packers	Independents	Bakers	Candy makers	Chains	Others
				<u>Pounds sold</u>				
1/12-lb RJ	---	12	---	144	---	---	---	111
1/30-lb Super	---	---	2,116	---	---	---	---	---
1/60-lb Can	174,240	1,440	32,475	2,460	53,820	---	840	960
1/650-lb Drum	166,112	6,938	486,495	---	113,467	---	---	185,198
Total	360,352	8,390	521,086	2,604	167,287	---	840	166,269
				<u>Per cent of total bulk volume sold</u>				
1/12-lb RJ	---	a	---	a	---	---	---	a
1/30-lb Super	---	---	.2	---	---	---	---	---
1/60-lb Can	14.0	.1	2.6	.2	4.3	---	.1	a
1/650-lb Drum	14.9	.6	39.0	---	9.1	---	---	14.9
Total	28.9	.7	41.8	.2	13.4	---	.1	14.9

^aLess than 0.05 per cent.

Average net returns for Orange Blossom honey by type of pack and type of buyer

Table 43 is presented to show a comparison of average net returns per pound of Orange Blossom honey for various packs sold to the principal types of buyers, and filtered honey compared to unfiltered. The net returns per pound varied widely between types of buyers and between packs. Custom-packed filtered honey in 12/8-oz Palm Tree Pitchers and in 12/8-oz Ceramic Pottery were sold at a loss. A loss also resulted from sales of 12/1-lb Servers of unfiltered honey. The highest returns ranged from 47.1 cents to 55.9 cents for 12/8-oz Server Sets of filtered honey, but the 1955 volume of this item was only 784 pounds. The second highest return was 38.0 cents on 12/3-oz Cracker Baskets of unfiltered honey with 1955 volume a mere 4 pounds. The returns for packs in greater demand, such as the 24/1-lb Q, the 12/2-lb Q, 6/5-lb R. J., approximated more closely the then current cost of raw honey, 12-14 cents per pound. Average net returns for similar data for 1956 are in Appendix 4 (Table 81).

Distribution to Market Areas

Volumes sold and f.o.b. returns by cities and states

Florida honey was distributed, by the nine packers studied, in a broad area along the eastern seaboard extending from Florida to metropolitan New York with a few sales in the New England states. The heaviest concentration of markets was within Florida. Honey was shipped to 117 different cities or towns in Florida in 1955 and 1956. It was shipped to 63 market areas in Georgia, 28 in South Carolina, 44 in

Table 43.--Orange Blossom honey, 1955--comparison of average net returns per pound, filtered versus unfiltered, for various consumer-size packs sold to principal market outlets by 9 packers

Type of pack	Outlets (buyers)									
	Whole-salers		Chains		Cooperatives		Gift stands		Independents	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
12/3-oz CrBkt	---	---	---	---	---	---	---	\$0.380	---	---
12/3-oz Crate	---	---	---	---	---	---	\$0.367	---	---	---
48/3-oz Bbl	---	---	---	---	---	---	.132	---	---	---
48/3-oz EE	\$0.127	---	---	---	---	---	.031	.060	---	\$0.127
12/4-oz CPot	---	---	---	---	---	---	---	---	---	---
12/8-oz Jug	---	---	---	---	---	---	.199	---	---	---
12/8-oz PTPit	---	---	---	---	---	---	.170	---	---	.202
12/8-oz Plas	---	---	---	---	---	---	---	---	---	---
12/8-oz CPot	---	---	---	---	---	---	---	---	---	---
12/8-oz S&P	---	---	---	---	---	---	.127	---	---	---
12/8-oz SWSt	.559	---	---	---	---	---	.471	---	\$0.477	---
24/8-oz Q	.120	\$0.096	\$0.116	\$0.103	\$0.117	\$0.097	.141	.083	.106	\$0.114
24/8-oz FB	.073	---	---	.069	---	---	.112	.066	.133	.068
24/8-oz Sv	.230	---	---	---	---	---	.163	---	---	---
12/10-oz OBPHt	---	---	---	---	---	---	---	---	---	---
24/14-oz OJ	---	---	---	---	---	---	---	---	---	---
12/1-lb Sv	.113	---	---	---	---	---	.077	---	---	---
12/1-lb Sv/WC	.113	---	.102	---	.111	---	.111	-.089	.122	---
12/1-lb Beehv	---	---	.102	---	---	---	.139	---	.104	---
12/1-lb Cof-et	---	---	---	---	---	---	---	.038	---	---
12/1-lb Jug	---	---	---	---	---	---	---	---	---	---
12/1-lb Mammy	.160*	---	---	---	---	---	---	---	---	---
12/1-lb OGrk	---	---	---	---	---	---	.104	---	---	---
12/1-lb SHPit	---	---	---	---	---	---	.229	---	---	.239
24/1-lb Q	.122	.069	.133	.121	.143	.116	.141	.126	.117	.130
24/1-lb FB	.073	---	.081	.109	---	---	.112	.127	.110	.102

Table 43.---Continued

Type of pack	Outlets (buyers)											
	Whole- salers		Chains		Cooper- atives		Gift stands		Inde- pendents		Others	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
24/1-lb Beehv	---	---	---	---	---	---	\$0.261	---	---	---	---	---
24/1-lb BBhv	---	---	---	---	---	---	---	---	---	---	---	---
24/1-lb OBHv	---	---	---	---	---	---	.151	---	\$0.371	---	---	---
24/1-lb Cat	---	---	---	---	---	---	---	---	---	---	---	---
24/1-lb HB	---	---	---	---	---	---	\$0.235	---	---	---	---	---
24/1-lb Modrn	---	---	---	---	---	---	---	---	---	---	---	---
24/1-lb Tumb	---	---	---	---	---	---	---	---	---	---	---	---
12/21-oz Plas	---	---	---	---	---	---	---	---	---	---	---	---
12/2-lb Q	\$0.125	\$0.126	\$0.152	\$0.123	\$0.132	\$0.122	.132	.099	.135	\$0.129	\$0.153	---
12/2-lb FB	---	---	---	---	---	---	.136	---	---	---	---	---
12/2 1/2-lb Sq	.108	---	---	.124	---	---	.129	.106	.133	.117	---	---
12/2 1/2-lb Tin	---	---	---	---	---	---	---	.121	---	---	---	---
24/2 1/2-lb Tin	.149	---	---	---	---	---	---	---	---	---	---	---
24/2 1/2-lb Mltin	---	---	---	---	---	---	.140	---	.166	---	.162	---
12/3-lb STin	---	---	---	---	---	---	---	---	---	---	---	---
12/3-lb Jug	---	---	---	---	---	---	---	---	.171	---	---	---
6/4 1/4-lb RJ	.139	---	.150	---	---	---	---	---	.132	---	---	---
12/4 1/2-lb Mltin	---	---	---	---	---	---	---	---	---	---	---	---
12/4 1/2-lb Tin	---	---	---	---	---	---	---	---	---	---	---	---
6/5-lb RJ	.142	---	.151	---	.163	---	.149	.117	.147	.123	.192	\$0.102
6/5-lb Sq	---	---	---	.119	---	---	.167	.118	.148	.114	---	.167
6/5-lb Tin	---	---	---	.075	---	---	---	---	---	---	---	---
12/5-lb Tin	.108	.122	.106	.117	---	---	.132	.107	.124	.108	.153	.096
6/7-lb MJ	---	---	---	---	---	---	---	.056	---	---	.171	.096
6/9-lb STin	---	---	---	---	---	---	---	---	---	---	---	---
6/10-lb Tin	---	---	---	---	---	---	---	.122	---	---	---	---

* Custom packed, purchaser furnished materials.

North Carolina, 18 in New York, 16 in Virginia, and 14 in Alabama. By pinpointing a map of the eastern United States, it was evident that the majority of markets fell within a radius of approximately 500 miles of Leesburg, Florida, as an approximate central shipping point (Figure 5). Northwest Florida was pinpointed at Pensacola. It is assumed that this part of Florida was supplied by the packers of Tupelo honey produced in that area. Unfortunately, data were not available there for costs of packing or market distribution.

Shipments of honey were tabulated alphabetically by states and cities. All cities which received 1,000 pounds or more were listed. Cities with lesser amounts were combined in one group as "other." The tabulation revealed that Florida was first among the states in 1955, and took 53.4 per cent of all honey sold by the 9 packers (Table 44). The leading markets of the state were Miami, Tampa, Jacksonville, and Umatilla in order of importance by volume received. Miami led all cities with 13.6 per cent. Umatilla was principally a receiving point for bulk honey. The State of New York was second and received 13.1 per cent of total shipments. New York City accounted for 12.7 per cent of all sales and was second in importance among cities. Third among the states was Michigan with 11.2 per cent. The city of Onsted received the major portion of shipments in bulk to that state as it is the location of a large honey packing plant. Georgia received 8.5 per cent of shipments and was fourth.

Large volumes of bulk honey were also shipped to Hamburg, Germany and amounted to 3.4 per cent of the total for 1955.



Fig. 5.--Location of market areas in the U.S. for all honey sold by 9 packers, 1955 and 1956.

Table 44.--All honey, 1955--volumes sold, f.o.b. returns, and average f.o.b. prices received by packers in various market areas (listed cities had volumes of 1,000 pounds and over)

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
<u>Alabama</u>					
Alexander City	1,200	.0 ^a	600	\$ 319	\$0.265
Andalusia	1,458	.1	243	303	.208
Birmingham	8,790	.3	186	2,149	.244
Dothan	1,860	.1	207	405	.218
Fayette	11,040	.4	11,040	1,630	.148
Mobile	1,805	.1	164	457	.253
Montgomery	2,280	.1	760	598	.262
Others	2,820	.1	101	644	.228
Total Alabama	31,253	1.2	284	\$6,505	\$0.208
<u>Arkansas</u>					
Others	5	.0 ^a	5	\$ 1	\$0.230
Total Arkansas	5	.0 ^a	5	\$ 1	\$0.230
<u>Connecticut</u>					
Others	257	.0 ^a	86	\$ 52	\$0.201
Total Connecticut	257	.0 ^a	86	\$ 52	\$0.201
<u>Delaware</u>					
Others	312	.0 ^a	78	\$ 61	\$0.197
Total Delaware	312	.0 ^a	78	\$ 61	\$0.197
<u>Florida</u>					
Avon Park	12,158	.5	120	\$1,915	\$0.158
Bayard	34,222	1.3	188	9,177	.268

Table 44.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
Bonaventure	3,977	.2	66	\$ 810	\$0.204
Chiefland	1,374	.1	125	303	.220
Clearwater	2,710	.1	37	579	.214
Clermont	8,496	.3	37	1,547	.182
Clewiston	1,824	.1	52	345	.189
Cocoa	18,905	.7	51	4,275	.226
Davenport	6,842	.3	6,842	973	.142
Daytona, Daytona Bch.	27,097	1.1	81	3,617	.133
Deland	14,272	.6	30	2,729	.181
Dundee	1,110	.0 ^a	30	281	.253
Eau Gallie	6,429	.3	1,072	1,002	.156
Edgewater	57,299	2.3	3,581	8,578	.150
Estero	1,794	.1	112	407	.227
Ft. Myers	3,525	.1	75	693	.197
Haines City	5,806	.2	26	1,623	.280
Indian River City	4,225	.2	24	906	.215
Jacksonville	148,041	5.8	712	31,369	.211
Kissimmee	3,756	.1	221	757	.202
Lakeland	75,888	3.0	774	16,646	.219
Lake Wales	7,016	.3	40	1,637	.233
Leesburg	19,847	.8	36	3,565	.180
Live Oak	1,320	.1	1,320	242	.183
Melbourne	1,461	.1	487	197	.135
Miami	344,777	13.6	787	53,490	.155
Mims	4,423	.2	27	839	.190
Minneola	26,353	1.0	59	4,599	.174
Moore Haven	1,630	.1	163	281	.172
Mt. Dora	3,552	.1	237	809	.228
New Smyrna Beach	3,434	.1	90	548	.160
Ocala	12,499	.5	23	2,555	.204
Orlando	7,974	.3	92	1,215	.152
Pensacola	8,328	.3	157	1,648	.198
Punta Gorda	6,094	.2	174	940	.154
Rockledge	8,639	.3	32	1,944	.225
St. Augustine	2,496	.1	250	447	.179
St. Petersburg	78,450	3.1	1,868	15,438	.197
Sharpes	11,692	.4	34	2,594	.222
Tampa	202,548	8.0	560	38,953	.192
Titusville	1,433	.1	22	272	.190
Umatilla	142,227	5.6	9,482	15,465	.109

Table 44.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
Waldo	1,495	.1	100	\$ 349	\$0.233
Waverly	1,776	.1	48	551	.310
Others	13,909	.5	37	3,378	.238
Total Florida	1,353,123	53.4	199	\$240,488	\$0.178

Georgia

Albany	4,080	.2	291	\$ 566	\$0.139
Atlanta	90,768	3.6	1,068	12,204	.134
Augusta	8,250	.3	147	1,942	.235
Bowden	5,160	.2	304	1,172	.227
Carrollton	1,320	.1	440	313	.237
Cartersville	1,800	.1	450	443	.246
Cedartown	1,236	.0 ^a	177	281	.227
Columbus	1,488	.1	135	373	.251
Cornelia	3,457	.1	288	892	.258
Eastman	38,456	1.5	712	11,025	.287
Elberton	3,150	.1	450	724	.230
Griffin	2,040	.1	340	499	.245
Macon	6,456	.3	461	1,258	.195
Marietta	2,760	.1	394	710	.257
Newman	2,220	.1	278	594	.268
Quitman	11,160	.4	858	2,252	.202
Rockmart	1,800	.1	600	434	.241
Rome	3,600	.1	212	885	.246
Tallapoosa	2,040	.1	510	497	.244
Vidalia	3,270	.1	654	839	.257
Wrens	2,370	.1	125	562	.237
Others	17,765	.7	162	4,161	.234
Total Georgia	214,644	8.5	451	\$ 42,626	\$0.199

Illinois

Others	400	.0 ^a	44	\$ 69	\$0.171
Total Illinois	400	.0 ^a	44	\$ 69	\$0.171

Table 44.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
<u>Indiana</u>					
Others	234	.0 ^a	39	\$ 63	\$0.270
Total Indiana	234	.0 ^a	39	\$ 63	\$0.270
<u>Kansas</u>					
Others	120	.0 ^a	120	\$ 23	\$0.192
Total Kansas	120	.0 ^a	120	\$ 23	\$0.192
<u>Kentucky</u>					
Others	615	.0 ^a	205	\$ 95	\$0.155
Total Kentucky	615	.0 ^a	205	\$ 95	\$0.155
<u>Maine</u>					
Portland	1,892	.1	237	\$ 485	\$0.256
Others	60	.0	60	14	.233
Total Maine	1,952	.1	217	\$ 499	\$0.256
<u>Maryland</u>					
Baltimore	1,644	.1	183	\$ 333	\$0.202
Hagertown	1,248	.1	96	353	.283
Others	920	.0 ^a	184	175	.190
Total Maryland	3,812	.2	141	\$ 861	\$0.225

Table 44.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
<u>Massachusetts</u>					
Others	120	.0 ^a	120	\$ 21	\$0.173
Total Massachusetts	120	.0 ^a	120	\$ 21	\$0.173
<u>Michigan</u>					
Onsted	282,462	11.2	17,654	\$ 35,133	\$0.124
Others	246	.0 ^a	35	64	.260
Total Michigan	282,708	11.2	12,292	\$ 35,197	\$0.124
<u>Minnesota</u>					
Others	15	.0 ^a	8	\$ 4	\$0.244
Total Minnesota	15	.0 ^a	8	\$ 4	\$0.244
<u>Mississippi</u>					
Others	1,524	.1	80	\$ 363	\$0.238
Total Mississippi	1,524	.1	80	\$ 363	\$0.238
<u>Missouri</u>					
Others	34	.0 ^a	11	\$ 10	\$0.288
Total Missouri	34	.0 ^a	11	\$ 10	\$0.288
<u>Nebraska</u>					
Others	108	.0 ^a	54	\$ 29	\$0.266
Total Nebraska	108	.0 ^a	54	\$ 29	\$0.266

Table 44.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
<u>New Jersey</u>					
Montclair	1,021	.0 ^a	102	\$ 261	\$0.256
Others	1,091	.1	45	334	.306
Total New Jersey	2,112	.1	62	595	\$0.282
<u>New York</u>					
Buffalo	9,567	.4	504	\$ 1,889	\$0.197
New York City	320,822	12.7	4,335	46,153	.144
Others	1,245	.0 ^a	89	423	.340
Total New York	331,634	13.1	3,099	\$48,465	\$0.146
<u>North Carolina</u>					
Asheville	1,200	.0 ^a	600	\$ 290	\$0.242
Charlotte	12,255	.5	490	1,678	.137
Elkin	1,320	.1	220	3.0	.235
Greensboro	14,953	.6	748	2,155	.144
Hendersonville	2,100	.1	700	499	.238
Hickory	1,200	.0 ^a	1,200	302	.252
Leaksville	1,128	.0 ^a	161	268	.238
Mt. Airy	1,512	.1	302	359	.237
North Wilkesboro	1,410	.1	750	225	.160
Raleigh	3,929	.2	218	667	.170
Randleman	1,080	.0 ^a	270	266	.246
Rocky Mount	2,120	.1	199	387	.177
Salisbury	2,520	.1	280	686	.272
Shelby	2,796	.1	310	678	.242
Statesville	1,454	.1	484	165	.113
Winston-Salem	8,069	.3	299	1,446	.179
Zebulon	2,280	.1	326	438	.192
Greenville	3,300	.1	300	419	.127
Others	8,442	.3	134	1,996	.236
Total North Carolina	73,138	2.9	314	\$13,232	\$0.181

Table 44.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
<u>Ohio</u>					
Cleveland	1,859	.1	310	\$ 485	\$0.261
Others	913	.0 ^a	61	157	.172
Total Ohio	2,772	.1	132	642	\$0.232
<u>Pennsylvania</u>					
Philadelphia	6,354	.2	106	\$ 1,546	\$0.243
Shamokin	1,320	.1	102	235	.178
Others	1,271	.1	79	298	.234
Total Pennsylvania	8,945	.4	101	\$ 2,079	\$0.232
<u>South Carolina</u>					
Allendale	2,100	.1	175	\$ 603	\$0.287
Batesburg	1,248	.1	156	297	.238
Charleston	1,152	.0 ^a	128	212	.184
Columbia	6,929	.3	577	927	.134
Gaffney	1,392	.1	464	354	.254
Greenville	19,279	.8	876	4,748	.246
Greer	3,432	.1	686	847	.247
Orangeburg	2,496	.1	131	545	.218
Spartanburg	10,980	.4	439	2,667	.243
Sumter	936	.0 ^a	94	199	.102
Westminster	1,236	.0 ^a	247	541	.276
Others	9,042	.4	185	2,148	.238
Total South Carolina	60,222	2.4	416	\$ 13,888	\$0.231

Table 44.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
<u>Tennessee</u>					
Chattanooga	1,092	.0 ^a	182	\$ 170	\$0.156
Johnson City	1,140	.0 ^a	143	216	.189
Knoxville	28,278	1.1	857	4,394	.155
Others	2,616	.1	105	540	.206
Total Tennessee	33,126	1.2	460	\$ 5,320	\$0.161
<u>Texas</u>					
Others	29	.0 ^a	15	\$ 8	\$0.263
Total Texas	29	.0 ^a	15	\$ 8	\$0.263
<u>Virginia</u>					
Charlottesville	2,605	.1	651	\$ 316	\$0.121
Hampton	1,638	.1	61	383	.233
Harrisonburg	1,380	.0 ^a	173	289	.210
Others	4,272	.2	129	947	.222
Total Virginia	9,895	.4	137	\$ 1,935	\$0.196
<u>West Virginia</u>					
Bluefield	1,200	.0 ^a	1,200	\$ 180	\$0.149
South Charleston	1,200	.0 ^a	1,200	177	.147
Others	550	.0 ^a	110	158	.287
Total West Virginia	2,950	.1	421	\$ 515	\$0.175

Table 44.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns to packers	Average f.o.b. price per lb
<u>Canada</u>					
Others	315	.0 ^a	315	\$ 112	\$0.356
Total Canada	315	.0 ^a	315	\$ 112	\$0.356
<u>Germany</u>					
Hamburg	85,246	3.4	42,623	\$ 10,499	\$0.123
Total Germany	85,246	3.4	42,623	\$ 10,499	\$0.123
<u>Holland</u>					
Rotterdam	29,652	1.2	14,826	\$ 3,652	\$0.123
Total Holland	29,652	1.2	14,826	\$ 3,652	\$0.123
Not available	455	.0 ^a	114	\$ 137	\$0.300
Total	2,531,727	100.0	304	\$428,046	\$0.169

^aLess than 0.05 per cent.

Market area distribution in 1956 is given in Table 82 in Appendix 4. The principal market areas for that year were about the same as in 1955, with a few exceptions. Shipments to Michigan were almost nil and Germany's were reduced to 0.7 per cent of the total.

Volumes sold and average f.o.b. prices received for filtered Orange Blossom honey in 1-lb Q jars and 5-lb Tins in selected cities

The average f.o.b. prices for honey in all market areas were included in the above noted tables. However, it is important to stress that the prices reflected the average of all kinds of honey in all types of packs and did not provide a good basis for comparison between cities. Therefore, Tables 45 and 46 were constructed for filtered Orange Blossom Honey sold in 24/1-lb Q jars and 12/5-lb Tins in 1955 and 1956. These tables provided a comparison of volumes sold in the important market areas and also a better indication of price differences between areas for a specific pack.

In both years, Miami, Jacksonville, Tampa and Lakeland led the list for largest volume sales of the 1-lb Q packs (Table 45). All received shipments over 10,000 pounds in either year. Other markets, though important in total volumes of honey taken, had greatly reduced amounts of the 1-lb pack when compared to the leaders.

In 1955, the average f.o.b. price per pound for the 24/1-lb Q jar of Orange Blossom ranged from a low of 17.8 cents in Baltimore, Maryland to 24.9 cents in Leesburg, Florida. The lowest price received in 1956 was 21.2 cents in Sumter, South Carolina and the highest was 26.3 cents in Gainesville, Florida. With a few exceptions, all prices received were higher in 1956 than in 1955.

Table 45.--Filtered Orange Blossom honey in 24/1-lb Q jars--distribution of volumes sold and average f.o.b. prices received per pound by 5 packers in selected cities, 1955 and 1956

Cities	Volume sold (lbs)	Average f.o.b. price per lb	Volume sold (lbs)	Average f.o.b. price per lb
	1955		1956	
Miami, Fla.	27,264	\$0.207	26,160	\$0.230
Jacksonville, Fla.	22,800	.224	27,384	.241
Tampa, Fla.	20,280	.224	19,440	.240
Lakeland, Fla.	14,520	.239	22,200	.239
St. Petersburg, Fla.	5,472	.218	24	.258
Quitman, Ga.	4,080	.211	600	.238
Atlanta, Ga.	3,600	.213	840	.233
Macon, Ga.	2,472	.213	1,608	.235
Sumter, S. C.	1,440	.200	360	.212
Buffalo, N. Y.	1,320	.232	4,200	.244
Pensacola, Fla.	1,200	.210	1,440	.223
Winston-Salem, N. C.	1,080	.209	840	.239
Spartanburg, S. C.	840	.208	---	---
Haines City, Fla.	732	.223	608	.241
Bowden, Ga.	720	.212	360	.234
New York City, N. Y.	720	.220	---	---
Augusta, Ga.	648	.212	480	.231
Griffin, Ga.	600	.214	720	.215
Orangeburg, S. C.	600	.212	552	.215
Carrollton, Ga.	600	.213	240	.233
Orlando, Fla.	552	.222	1,920	.231
Montgomery, Ala.	480	.217	---	---
Albany, Ga.	480	.199	420	.236
Raleigh, N. C.	432	.216	144	.243
Columbia, S. C.	360	.199	---	---
Johnson City, Tenn.	360	.212	---	---
Hampton, Va.	312	.228	216	.243
Columbus, Ga.	312	.218	60	.239
Philadelphia, Pa.	264	.219	192	.234
Kosciusko, Miss.	240	.207	288	.224
Leesburg, Fla.	192	.249	72	.234
Baltimore, Md.	192	.178	240	.247
Moore Haven, Fla.	132	.202	48	.239
Gainesville, Fla.	120	.214	24	.263
Ocala, Fla.	96	.246	708	.249
Wilmington, Del.	72	.210	120	.246
Richmond, Va.	72	.229	48	.226
Chattanooga, Tenn.	24	.200	---	---
Knoxville, Tenn.	24	.193	---	---
Birmingham, Ala.	---	---	180	.224
Total	115,704	\$0.219	112,736	\$0.237

An extreme change in the volume sold of the 5-lb Tins of filtered Orange Blossom occurred between 1955 and 1956 in the important St. Petersburg market. Volume fell from 58,740 pounds in 1955 to 120 pounds in 1956 (Table 46). None of these 5-lb packs were sold in Jacksonville or Atlanta in either year, although both cities received very large amounts of honey in total. Prices received also varied between markets for this pack, with a low of 14.4 cents in Miami, Florida, to a high of 31.1 cents in Louisville, Kentucky for 1955. However the latter was for a lot of only 15 pounds sent by parcel post. In 1956, the low price of 15.5 cents was obtained for shipments to Moore Haven, Florida, and the highest was 23.4 cents for a 15 pound lot sent parcel post to Memphis, Tenn. The last 7 items in Table 46 for 1955 were all parcel post shipments and showed a definite price advantage in selling 5-lb Tins by mail with the exception of that sold in Mobile, Alabama. The fact that consumers are willing to purchase honey by mail at premium prices suggests the possibility of an expansion in mail-order sales by means of advertising.

As is evident from the tables, prices varied considerably between the different market areas for both packs and in both years. A factor influencing prices received was that packers who operated their own sales routes would charge one price for a specific item to all customers irrespective of the distance traveled and the transportation costs to make deliveries. Also, some packers charged lower prices for shipments of 10 cases of an item than for one case because of savings in packing and handling larger volumes in a single order.

Table 46.--Filtered Orange Blossom honey in 12/5-lb Tins--distribution of volumes sold and average f.o.b. prices received per pound by 5 packers in selected cities, 1955 and 1956

Cities	Volume sold (lbs)	Average f.o.b. price per lb	Volume sold (lbs)	Average f.o.b. price per lb
1955			1956	
St. Petersburg, Fla.	58,740	\$0.182	120	\$0.213
Miami, Fla.	36,300	.144	28,380	.162
Bayard, Fla.	11,640	.181	6,540	.177
Eastman, Ga.	6,600	.174	9,300	.187
Leesburg, Fla.	5,880	.161	7,505	.172
Cocoa, Fla.	5,230	.189	11,355	.194
Ocala, Fla.	4,275	.153	7,360	.167
Lake Wales, Fla.	3,390	.191	780	.202
Avon Park, Fla.	3,300	.189	1,950	.185
New York City, N. Y.	3,030	.183	2,520	.186
Tampa, Fla.	2,700	.171	3,300	.200
Haines City, Fla.	1,660	.191	1,620	.201
Bonaventure, Fla.	1,585	.181	550	.187
Moore Haven, Fla.	1,215	.146	2,700	.155
Daytona Beach, Fla.	1,180	.165	1,380	.169
Orlando, Fla.	930	.180	690	.184
Chiefland, Fla.	780	.188	600	.204
New Smyrna Beach, Fla.	600	.176	340	.179
Chattanooga, Tenn	600	.156	60	.192
Lake Alfred, Fla.	540	.190	200	.200
Richmond, Va.	180	.219	---	---
Lakeland, Fla.	120	.163	120	.176
Winston-Salem, N. C.	120	.188	100	.199
Norfolk, Va.	120	.192	---	---
Philadelphia, Pa.	30	.224	30	.232
Gary, Ind.	20	.250	---	---
Louisville, Ky.	15	.311	---	---
Memphis, Tenn.	15	.250	15	.234
Mobile, Ala.	5	.192	---	---
Peoria, Ill.	5	.234	---	---
Minneapolis, Minn.	5	.244	---	---
Albany, N. Y.	5	.234	---	---
Allentown, Pa.	5	.232	15	.210
Total	150,820	\$0.171	87,530	\$0.176

Finally, packers of the same item, delivering to the same market and in the same quantity would individually differ in the prices they charged.

Net returns for filtered Orange Blossom honey compared to unfiltered for important packs sold in selected cities

The average net returns to packers for Orange Blossom honey in the most important pack sizes, were also calculated for the purpose of comparing filtered honey with unfiltered in various markets. The comparisons were limited to markets in Florida with the exception of New York City, since that was the only sizeable market receiving unfiltered honey in consumer packs. Each item tabulated had sales of at least 45,000 pounds in either 1955 or 1956. The tables also serve as a guide to the specific types of packs sold in the larger markets. For instance, though total sales of Orange Blossom honey in 1-lb Q jars were 138,922 pounds in 1955, there were no sales of this item in Birmingham, Ala., Bayard, Fla., Edgewater, Fla., New Smyrna Beach, Fla., Sharpes, Fla., Eastman, Ga., or Greenville, S. C. (Table 47). A similar situation occurred in 1956 with the exception of Birmingham, Ala. (Table 48). Yet these same areas received large quantities of other Florida honey items.

Filtered honey, in the most important pack sizes, was sold in many more market areas than the unfiltered, and the net prices received were higher for the filtered with few exceptions. The average net returns for other important honey items, all having had sales of at least 20,000 pounds in 1955 or 1956, are included in Appendix 4 (Tables 83 and 84).

Table 47.--Orange Blossom honey, 1955--comparison of average net returns per pound for important consumer-size packs sold in selected cities by 9 packers

Cities	Type of pack					
	24/1-lb Q		12/2-lb Q		12/5-lb Tin	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	\$0.121	----	----	----
Avon Park, Fla.	\$0.137	----	.143	----	\$0.140	----
Bayard, Fla.	----	----	----	----	.132	----
Clearwater, Fla.	----	\$0.137	----	\$0.145	----	\$0.124
Cocoa, Fla.	.153	----	.165	----	.140	----
Daytona Beach, Fla.	----	.116	.125	.160	.116	.113
Deland, Fla.	----	.131	----	----	----	.120
Edgewater, Fla.	----	----	----	----	----	----
Ft. Myers, Fla.	----	.129	----	.139	----	----
Haines City, Fla.	.133	----	.102	----	.142	----
Jacksonville, Fla.	.134	----	----	----	----	----
Lakeland, Fla.	.150	.133	.154	----	.114	----
Lake Wales, Fla.	.143	----	.149	----	.142	----
Leesburg, Fla.	.159	.109	.131	.072	.112	.093
Miami, Fla.	.117	.120	.110	.120	.095	.083
Minneola, Fla.	----	.117	----	.091	----	.108
New Smyrna Beach, Fla.	----	----	----	----	.127	----
Ocala, Fla.	.156	----	.110	----	.104	----
Orlando, Fla.	.132	----	----	----	.131	----
Pensacola, Fla.	.120	----	.117	----	----	----
Rockledge, Fla.	----	----	.166	----	.138	----
St. Petersburg, Fla.	.128	----	.143	----	.135	----
Sharps, Fla.	----	----	.172	----	.137	----
Tampa, Fla.	.134	.104	.126	.121	.122	.101
Atlanta, Ga.	.123	----	.130	----	----	----
Augusta, Ga.	.122	----	.117	----	----	----
Bowden, Ga.	.122	----	.126	----	----	----
Eastman, Ga.	----	----	----	----	.125	----
Quitman, Ga.	.121	----	----	----	----	----
Buffalo, N. Y.	.142	----	.147	----	----	----
New York, City, N. Y.	.130	.121	.125	.128	.134	.122
Winston-Salem, N. C.	.119	----	----	----	.139	----
Philadelphia, Pa.	.129	----	.124	----	.175	----
Greenville, S. C.	----	----	----	----	----	----
Orangeburg, S. C.	.122	----	.121	----	----	----
Spartenburg, S. C.	.118	----	----	----	----	----
Knoxville, Tenn.	.102	----	----	----	----	----
Richmond, Va.	.139	----	.146	----	.170	----

Table 48.--Orange Blossom honey, 1956--comparison of average net returns per pound for important consumer-size packs sold in selected cities by 9 packers

Cities	Type of pack					
	24/1-1b Q		12/2-1b Q		12-5-1b Tin	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	\$0.124	----	\$0.141	----	-----	-----
Avon Park, Fla.	.142	----	.158	----	\$0.135	-----
Bayard, Fla.	-----	-----	-----	-----	.127	-----
Clearwater, Fla.	-----	\$0.128	-----	\$0.165	-----	\$0.124
Cocoa, Fla.	-----	-----	.164	-----	.144	-----
Daytona & Beach, Fla.	-----	.108	.142	-----	.119	.115
Deland, Fla.	-----	.122	-----	-----	-----	.128
Edgewater, Fla.	-----	-----	-----	-----	-----	-----
Ft. Myers, Fla.	-----	-----	-----	-----	-----	-----
Haines City, Fla.	.141	-----	.159	-----	.151	-----
Jacksonville, Fla.	.141	-----	-----	-----	-----	-----
Lakeland, Fla.	.139	-----	.153	-----	.126	-----
Lake Wales, Fla.	.157	-----	.166	-----	.152	-----
Leesburg, Fla.	.134	.127	.138	.106	.122	.115
Miami, Fla.	.130	.121	.133	.130	.112	-----
Minneola, Fla.	-----	.132	-----	.110	-----	.130
New Smyrna Beach, Fla.	-----	-----	-----	-----	.129	-----
Ocala, Fla.	.149	-----	.137	-----	.117	-----
Orlando, Fla.	.131	-----	.149	-----	.134	-----
Pensacola, Fla.	.123	-----	.121	-----	-----	-----
Rockledge, Fla.	-----	-----	.150	-----	.137	-----
St. Petersburg, Fla.	.158	.125	.172	.130	.163	.134
Sharpes, Fla.	-----	-----	.163	-----	.144	-----
Tampa, Fla.	.140	.118	.161	.130	.150	-----
Atlanta, Ga.	.134	-----	.148	-----	-----	-----
Augusta, Ga.	.131	-----	-----	-----	-----	-----
Bowden, Ga.	.134	-----	.140	-----	-----	-----
Eastman, Ga.	-----	-----	.149	-----	.136	-----
Quitman, Ga.	.134	-----	-----	-----	-----	-----
Buffalo, N. Y.	.144	-----	.148	-----	.157	-----
New York City, N. Y.	-----	.146	.174	.154	.134	.154
Winston-Salem, N. C.	.139	-----	-----	-----	.149	-----
Philadelphia, Pa.	.134	-----	.138	-----	.182	-----
Greenville, S. C.	-----	-----	-----	-----	-----	-----
Orangeburg, S. C.	.115	-----	.121	-----	-----	-----
Spartenburg, S. C.	-----	-----	-----	-----	-----	-----
Knoxville, Tenn.	-----	-----	-----	-----	.122	-----
Richmond, Va.	.126	-----	.143	-----	-----	-----

Overlapping market areas in Florida of nine packers

As previously stated, more than half of the honey packed by 9 packers was sold within the State. It should be stressed again that the results and discussions of this study are based on a sample of 9 packers and do not imply that they represent the entire honey packing industry of Florida. The demand for honey was so great in Miami that 7 of the 9 packers in the sample were competing in the Miami market (Table 49). The Leesburg-Ocala area had six competing firms and Orlando had five. The markets listed in the table were chosen because of their importance in the more developed and populated sections of the State. Sebring does not in itself have a large population, but is in a well travelled tourist area of the State. By using Table 47 as a guide and referring to population data, it becomes evident that a potential still exists for further expansion of sales within the State, by the 9 packers studied. Tallahassee, with a population of approximately 30,000, was not listed in Table 44 in the discussion on market areas because total sales, of two packers selling there, did not exceed 1,000 pounds in either 1955 or 1956. Gainesville, with a similarly large population, also was not listed in that table for the same reason. Pensacola sales for two packers amounted to 8,328 pounds in 1955 and 4,756 pounds in 1956 for a population of approximately 45,000 people.

It would seem that lower-priced Orange Blossom or Light Amber honey from the central and southern producing areas could compete successfully with the higher priced Tupelo produced in Northwest Florida.

Table 49.--All honey, 1955 and 1956--chart of overlapping competitive market areas in Florida in which 9 packers sold consumer-size packs

Terminal market areas	Firms									Firms selling in area
	A	B	C	D	E	F	G	H	I	
Daytona	-	X	-	X	-	X	-	X	-	4
Fort Myers-Clewiston	-	-	X	-	-	-	X	-	-	2
Gainesville	-	-	-	-	-	X	-	-	-	1
Jacksonville	X	-	-	X	-	X	-	X	-	4
Lakeland	X	X	-	-	-	X	X	-	-	4
Leesburg-Ocala	X	X	X	X	-	X	-	-	X	6
Miami	X	X	X	X	-	X	X	X	-	7
Orlando	-	X	-	X	-	X	X	X	-	5
Pensacola	X	-	-	-	-	-	-	X	-	2
Sebring	X	-	X	-	-	-	-	-	-	2
Tallahassee	-	-	-	X	-	X	-	-	-	2
Tampa-St. Petersburg	X	-	-	-	X	X	X	-	-	4
West Palm Beach	-	X	X	X	-	X	X	-	-	5

Seasonal Distribution

The seasonal distribution of Florida honey does not coincide with the period(s) of production. Honey is produced only during the blooming season of the principal sources of nectar. This occurs early in the spring for citrus (herein called Orange Blossom) and later for various other flowers as they come into bloom. After honey is collected from the hives and extracted by beekeepers, it is usually sold within a short time to packers, who store it until needed for packing. Sometimes it is stored by the beekeepers for later sale, since storage does not affect quality if it is sealed well to keep out moisture.

Packing and distribution of honey is a year-round activity and the volume packed at any given time depends on the seasonal demand translated from incoming orders to the packers.

Volumes of sales by months in Florida and in other states

The sales data for the two years studied were tabulated on a monthly basis to obtain a pattern of seasonal distribution for consumer-size packs of honey. Separate tabulations were made for honey sold in Florida, and for the United States excluding Florida (Tables 50 and 51). The results are graphically illustrated in Figure 6. In 1955, sales to markets in Florida were in large volumes from January through April. They were down considerably in May and the summer months, and entered a rising trend in October which continued on to a peak in March of 1956. Marketings declined again in the summer of 1956 and started rising in the fall months, as they did in 1955. Though data were available for only two years, there was a definite pattern

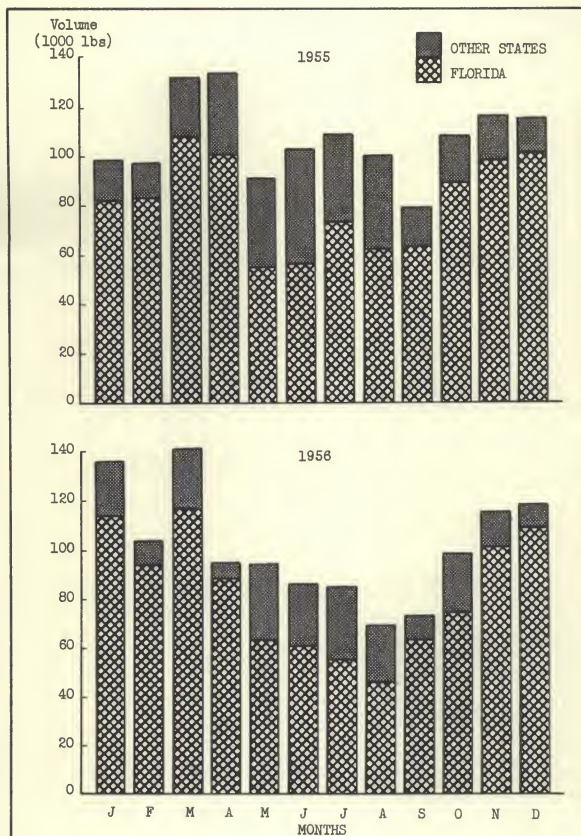


Fig. 6.--Comparison of monthly sales of all honey in consumer packs in Florida and other states, 9 packers, 1955 and 1956.

Table 50.--All honey, 1955 and 1956, in consumer sizes, filtered and unfiltered combined--seasonal distribution of volumes sold in Florida, average f.o.b. prices received per pound, and index of prices received by 9 packers

Period	Volume (lbs)	Per cent of total volume	Total f.o.b. return	Average f.o.b. price per lb	Index of f.o.b. price received ^a
<u>1955</u>					
January	82,131	8.5	\$ 16,678	\$0.203	99
February	82,498	8.6	17,286	.210	102
March	108,120	11.2	21,106	.195	95
April	100,275	10.4	20,298	.202	98
May	54,706	5.7	10,906	.199	97
June	55,741	5.8	10,937	.196	95
July	66,963	7.0	13,753	.205	100
August	62,164	6.5	12,452	.200	97
September	62,604	6.5	12,133	.194	94
October	88,627	9.2	18,585	.210	102
November	97,716	10.1	20,659	.211	102
December	100,996	10.5	19,664	.195	95
Total	962,541	100.0	\$194,455	\$0.202	98
<u>1956</u>					
January	113,697	11.6	\$ 22,711	\$0.200	97
February	94,141	9.6	18,963	.201	98
March	116,629	11.9	24,557	.211	102
April	88,681	9.0	18,005	.203	99
May	63,264	6.4	13,163	.208	101
June	60,177	6.1	13,497	.224	109
July	54,637	5.5	11,727	.215	104
August	45,750	4.6	10,030	.219	106
September	63,462	6.4	12,481	.197	96
October	74,354	7.6	15,921	.214	104
November	100,292	10.2	22,632	.227	110
December	108,782	11.1	23,265	.214	104
Total	983,866	100.0	\$206,952	\$0.210	102
Grand total	1,946,407		\$401,407	\$0.206	100

^aAverage of 1955 and 1956 f.o.b. price received per pound is base of index.

Table 51.--All honey, 1955 and 1956, in consumer sizes, filtered and unfiltered combined--seasonal distribution of volumes sold in the U. S., excluding Florida, average f.o.b. prices received per pound, and index of prices received by 9 packers

Period	Volume (lbs)	Per cent of total volume	Total f.o.b. return	Average f.o.b. price per lb	Index of f.o.b. price received ^a
<u>1955</u>					
January	16,619	5.2	\$ 4,203	\$0.253	102
February	15,327	4.8	3,901	.255	103
March	23,991	7.4	5,341	.223	90
April	33,695	10.5	8,175	.243	98
May	36,225	11.2	8,590	.237	96
June	47,630	14.7	11,233	.236	95
July	42,417	13.2	10,251	.242	98
August	37,898	11.8	8,667	.229	92
September	16,217	5.0	3,717	.229	92
October	19,737	6.1	5,352	.271	109
November	18,397	5.7	4,517	.246	99
December	14,205	4.4	3,169	.223	90
Total	322,358	100.0	\$ 77,116	\$0.239	96
<u>1956</u>					
January	22,325	9.7	\$ 5,692	\$0.255	103
February	9,959	4.3	2,113	.212	85
March	23,983	10.4	6,483	.270	109
April	6,141	2.7	1,535	.250	101
May	31,478	13.5	8,482	.269	108
June	26,063	11.3	6,593	.253	102
July	30,317	13.2	7,497	.247	100
August	23,430	10.2	5,820	.248	100
September	9,433	4.1	2,708	.287	116
October	23,245	10.1	6,211	.267	108
November	14,736	6.4	4,156	.282	114
December	9,368	4.1	2,568	.274	110
Total	230,478	100.0	\$ 59,858	\$0.260	105
Grand total	552,836		\$136,974	\$0.248	100

^a Average of 1955 and 1956 f.o.b. price received per pound is base of index.

of a cycle, showing high volume in winter months and low volume in summer months.

The sales volume of consumer-size packs sold in other states by 9 packers was 33.5 per cent of the Florida volume in 1955 and 23.4 per cent in 1956. However, the pattern of seasonal distribution in other states, excluding Florida, was the opposite of the pattern of sales in Florida. The volume sold in other states, in 1955, was low in the winter months, increased in April, remained high during the summer and slumped in September. A similar pattern though somewhat erratic in April and September was repeated in 1956.

Another interesting result of the tabulation of seasonal sales of all honey to other states was that the average monthly f.o.b. returns per pound for other areas was from three to nine cents higher per pound than for sales in Florida. The difference of nine cents occurred in September, 1956. These higher returns indicate a demand outside of Florida for the higher priced items such as servers and comb packs of filtered honey. Only a very small quantity of unfiltered honey was shipped out of the State in consumer-size packs. Most of the unfiltered honey shipped out of Florida went in bulk.

Season distribution patterns for two important consumer packs of Orange Blossom honey sold in Florida and in other states

A seasonal distribution was prepared for the two most important items of Orange Blossom honey sold--the 1-lb Q jar and the 5-lb Tin (Tables 52 and 53). Sales of both items followed the general seasonal pattern of all honey described above. The average f.o.b. price received per pound in the 1-lb Q jars was slightly higher than

Table 52.--Orange Blossom honey, 1955 and 1956, in 1-lb Q jars, filtered and unfiltered combined--seasonal distribution of volume sold, average f.o.b. prices received per pound and index of prices received by 9 packers (annual volume over 100,000 pounds)

Period	Volume (lbs)	Per cent of total volume	Total f.o.b. return	Average f.o.b. price per lb	Index of f.o.b. price received ^a
<u>1955</u>					
January	8,556	6.2	\$ 1,755	\$0.205	90
February	12,304	8.9	2,662	.216	95
March	15,268	11.0	3,142	.206	91
April	13,836	10.0	2,983	.216	95
May	7,351	5.3	1,530	.208	92
June	7,204	5.2	1,572	.218	96
July	10,902	7.8	2,377	.218	96
August	9,978	7.2	2,191	.220	97
September	12,690	9.1	2,726	.215	95
October	12,774	9.2	3,035	.238	105
November	16,602	11.9	3,728	.225	99
December	11,457	8.2	2,648	.231	102
Total	138,922	100.0	\$30,349	\$0.218	96
<u>1956</u>					
January	19,863	13.9	\$ 4,488	\$0.226	100
February	13,212	9.2	3,028	.229	101
March	16,947	11.9	3,832	.232	102
April	11,004	7.7	2,558	.232	102
May	11,412	8.0	2,709	.237	104
June	7,940	5.6	1,933	.244	108
July	6,492	4.5	1,543	.238	105
August	7,590	5.3	1,811	.239	105
September	7,464	5.2	1,775	.238	105
October	10,872	7.6	2,633	.242	107
November	16,644	11.6	4,006	.241	106
December	13,596	9.5	3,282	.241	106
Total	143,036	100.0	\$33,698	\$0.236	104
Grand total	281,958		\$64,047	\$0.227	100

^aAverage of 1955 and 1956 f.o.b. price received per pound is base of index.

Table 53.--Orange Blossom honey, 1955 and 1956, in 5-lb Tins, filtered and unfiltered combined--seasonal distribution of volume sold, average f.o.b. prices received per pound, and index of prices received by 9 packers (annual volume over 100,000 pounds)

Period	Volume (lbs)	Per cent of total volume	Total f.o.b. return	Average f.o.b. price per lb	Index of f.o.b. price received ^a
<u>1955</u>					
January	11,655	5.6	\$ 1,919	\$0.165	94
February	14,005	6.7	2,344	.167	95
March	34,640	16.7	5,696	.164	93
April	18,995	9.2	3,269	.172	98
May	15,525	7.5	2,566	.165	94
June	17,155	8.3	3,064	.179	102
July	14,505	7.0	2,499	.172	98
August	15,920	7.7	2,831	.178	101
September	4,500	2.2	670	.149	85
October	17,055	8.2	3,022	.177	101
November	24,995	12.0	4,473	.178	101
December	18,565	8.9	3,043	.164	93
Total	207,515	100.0	\$35,396	\$0.171	97
<u>1956</u>					
January	13,570	6.9	\$ 2,335	\$0.172	98
February	14,580	7.4	2,510	.172	98
March	33,820	17.1	6,166	.182	103
April	14,855	7.5	2,700	.182	103
May	16,390	8.3	2,930	.179	102
June	13,480	6.8	2,583	.192	109
July	13,790	7.0	2,569	.186	106
August	12,650	6.4	2,256	.178	101
September	6,565	3.3	1,227	.187	106
October	19,430	9.8	3,668	.189	107
November	18,710	9.5	3,398	.182	103
December	19,895	10.0	3,596	.181	103
Total	197,735	100.0	\$35,938	\$0.182	103
Grand total	405,250		\$71,334	\$0.176	100

^aAverage of 1955 and 1956 f.o.b. price received per pound is base of index.

for all honey, and was approximately four cents higher on average than for the 5-lb Tins. However, when making this comparison, it is important to consider that the cost of packing the 1-lb Q jar was higher on a pound basis than the cost of packing the 5-lb Tin. In this case, the cost was approximately four cents more to pack the 1-lb size. The general trend of f.o.b. prices, as shown by the indexes, was upward for the 2 years tabulated.

Seasonal distribution to important buyers

The final breakdown of seasonal distribution data is in Table 54, and shows the monthly percentage of annual volume purchased by each important type of buyer. It was found that the sales to wholesalers was on a high level from spring through summer in both years studied. Sales to corporate chains were high in the winter and declined in the summer, though sales in January 1955 did not fit the general pattern. Purchases of the cooperative chains were seasonally erratic, but had peak volumes in November of both years (Figures 7 and 8).

The gift stands were consistent with high volumes in November and March of both years and comparatively low volumes in the summer months. This corresponded with the great influx of winter visitors to Florida and their departure in the spring (Figure 8). Sales to independent grocers were highly erratic with no definite trend over two years. No definite distribution pattern was evident for the sales to other honey packers, to bakers or to other buyers (Figure 9). Honey packers purchase consumer-size packs from one another only when they receive unusually large orders which they are unable to fill

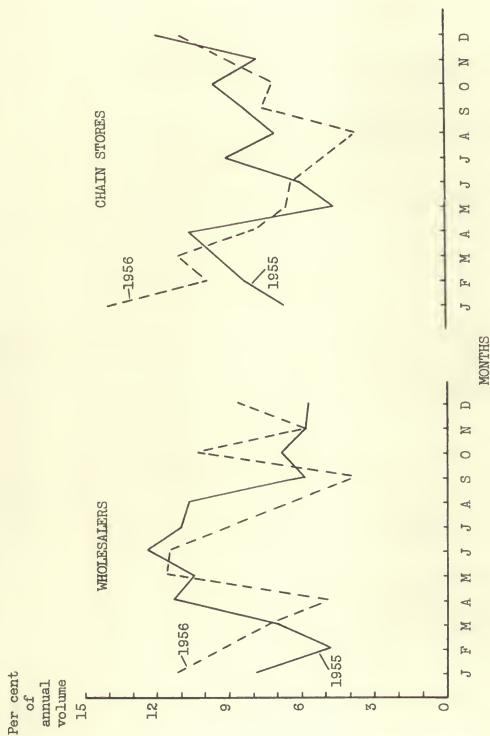


Fig. 7.--Variation in percentage of annual volume of all honey in consumer packs purchased monthly by wholesalers and chains from 9 packers, 1955 and 1956.

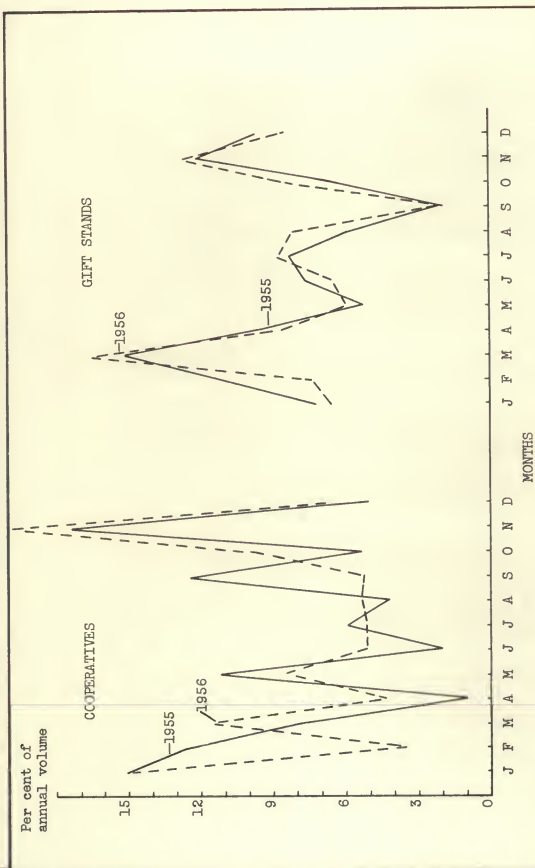


Fig. 8.--Variation in percentage of annual volume of all honey in consumer packs purchased monthly by cooperatives and gift stands from 9 packers, 1955 and 1956.

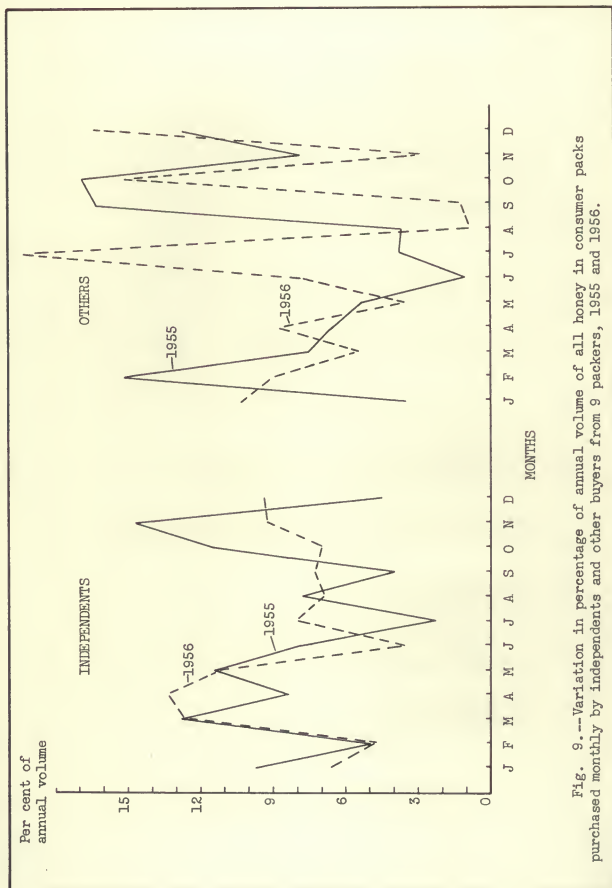


Fig. 9.--Variation in percentage of annual volume of all honey in consumer packs purchased monthly by independents and other buyers from 9 packers, 1955 and 1956.

Table 54.--All honey, 1955 and 1956, in consumer sizes, filtered and unfiltered--monthly percentages of annual volumes purchased by important buyers from 9 packers

[illegible]

immediately because of limited packing facilities or because of a temporary shortage of materials and honey to pack.

The distribution of bulk sales, similarly, had no definite seasonal pattern (Tables 85 and 86 in Appendix 4).

CHAPTER VI

SHIPPING METHODS AND TRANSPORTATION COSTS

Principal Methods of Shipping to Terminal Markets

Each of the cooperators in this study started in the honey-packing business as combination packers and jobbers, delivering to customers by driving their own trucks, and soliciting business along the highways. With an expansion of sales volume, some of the packers found it more profitable to specialize in processing and packing honey, and hiring others to carry out the distribution. However, other packers continued with a vertically integrated system of producing, packing, and distributing, utilizing their trucking equipment and personnel as needed in each operation.

In developing the data on transportation, it was found that packers utilized every method of transportation except air freight. The most desirable method of delivery was the f.o.b. pick-up at the packing plant, in which the purchaser would take possession and do his own hauling. This method assured fast delivery, reduced bookkeeping work for the office force, and eliminated the time-consuming correspondence and negotiations occasioned by accidental losses and breakage, when commercial carriers were hired for hauling.

Volumes sold and methods of transportation used

In 1955, the largest proportion of sales was picked up at the plants by customers, and reached a sum of 825,440 pounds--32.6 per cent of the total sales, filtered and unfiltered honey combined. The volume of pick-ups decreased to 595,466 pounds in 1956 and was 25.3 per cent of the total. In the latter year, packers' own deliveries also decreased from 678,823 pounds (in 1955) to 642,502 pounds. Percentagewise, truck collect deliveries accounted for the greatest volume of 1956 shipments, being 30.3 per cent, versus 27.2 per cent for packers' own deliveries. The extremely high volume of unfiltered bulk shipments by truck collect in 1956 was due principally to the very large increase of one packer's sales from 380,947 pounds in 1955 to 636,490 pounds in the latter year. Of the latter poundage, 87.2 per cent was shipped truck collect, mostly in bulk.

Shipments by truckline also represented a large share of the total volume of sales. They amounted to 537,843 pounds in 1955 and 396,840 pounds in 1956, 21.2 per cent and 16.7 per cent of the totals, respectively. Technically these and truck-collect deliveries could be placed in one category.

Packers were most agreeable in shipping their products by whatever means of transportation the purchaser desired. Most out-of-state customers preferred truck shipments because delivery was faster than the other methods. A few customers preferred shipment by freight (rail) collect or express collect. In the tabulations, it was found that the average f.o.b. return per pound of filtered honey shipped express collect in 1955 and rail collect in 1956, were 28.7 cents and

29.7 cents respectively; these exceptionally high returns occurred because the shipments were higher-priced Tupelo and Orange Blossom comb packs. The returns on parcel post shipments for filtered honey were also high, as previously discussed in Chapter V. Methods of transportation used for filtered, unfiltered, consumer sizes and bulk are in Tables 55 to 58.

Methods of shipping used by important buyers

Tabulations were made to ascertain the preferred methods of shipping used by important buyers. Wholesalers received shipments by truckline of 14.1 per cent of all filtered honey sold in 1955 (Table 59). Chains picked up, with their own trucks, 19.2 per cent of the total. Gift stands and independents, combined, received 15.4 per cent in shipments delivered by packers. Other packers also picked up large amounts with their own trucks--20.5 per cent of the total and other buyers received 7.4 per cent by truckline. The other methods of shipping were used to a lesser degree by buyers.

A similar tabulation was prepared for unfiltered honey sold in 1955 (Table 60). It was found that wholesalers received 20.4 per cent and bakers received 12.5 per cent of the total, shipped truck collect. Packers delivered with their own trucks to wholesalers 10.1 per cent of all sales. Other packers received 6.2 per cent by truckline, and picked up with their own trucks 11.4 per cent of the total unfiltered sold.

The percentages for 1956 are in Appendix 4 (Tables 87 and 88).

Table 55.--All filtered honey, 1955--volumes shipped by type of carrier, f.o.b. returns, and average f.o.b. prices received by 9 packers

Carrier	No. of lots	Volume shipped (lbs)	Average volume per lot (lbs)	Per cent of total volume ^b	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
Packer	2,930	376,522	129	14.9	\$ 76,599	\$0.203
Truckline	1,386	327,231	236	12.9	75,074	.229
Rail freight	27	5,875	218	.3	1,462	.249
Express	2	60	30	a	14	.233
Parcel post	64	677	11	a	201	.297
Truck collect	112	10,507	94	.4	2,620	.249
Express collect	5	150	30	a	43	.287
Purchaser	1,286	359,968	280	14.2	79,541	.221
Total	5,812	1,080,990	186	42.7	\$235,554	\$0.218
<u>Bulk sizes</u>						
Packer	2	17,882	8,941	0.7	\$ 2,603	\$0.146
Truckline	55	140,825	2,560	5.6	17,992	.128
Rail freight	13	8,220	632	.3	1,396	.170
Truck collect	4	1,320	330	a	219	.166
Express collect	14	1,440	103	.1	256	.178
Purchaser	43	310,499	7,221	12.3	39,453	.127
Total	131	480,186	3,666	19.0	\$ 61,917	\$0.129
All sizes	5,943	1,561,176	263	61.7	\$297,471	\$0.191

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 56 to equal 100 per cent.

Table 56.--All unfiltered honey, 1955--volumes shipped by type of carrier, f.o.b. returns, and average f.o.b. prices received by 8 packers

Carrier	No. of lots	Volume shipped (lbs)	Average volume per lot (lbs)	Per cent of total volume ^b	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
Packer	1,760	160,188	91	6.4	\$ 27,224	\$0.170
Truckline	14	8,340	596	.3	1,626	.195
Rail freight	3	204	68	a	55	.270
Parcel post	1	5	5	a	1	.200
Truck collect	6	1,926	321	.1	375	.195
Express collect	4	432	108	a	84	.194
Purchaser	162	30,114	185	1.2	5,988	.199
Boat	6	2,700	450	.1	664	.246
Total	1,956	203,909	104	8.1	\$ 36,017	\$0.177
<u>Bulk sizes</u>						
Packer	85	124,231	1,462	4.9	\$ 14,206	\$0.114
Truckline	6	61,447	10,241	2.4	6,985	.114
Truck collect	158	319,445	2,515	12.6	41,106	.129
Express collect	1	360	360	a	48	.133
Purchaser	31	124,859	4,028	4.9	14,067	.113
Boat	3	156,300	45,433	5.4	18,146	.133
Total	264	766,642	2,904	30.2	\$94,558	\$0.123
All sizes	2,220	970,551	437	38.3	\$130,575	\$0.135
Grand total	8,163	2,531,727	310	100.0	\$428,046	\$0.169

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 55 to equal 100 per cent.

Table 57.--All filtered honey, 1956--volumes shipped by type of carrier, f.o.b. returns, and average f.o.b. prices received by 9 packers

Carrier	No. of lots	Volume shipped (lbs)	Average volume per lot (lbs)	Per cent of total volume ^b	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
Packer	2,785	278,370	100	11.8	\$ 59,626	\$0.214
Truckline	953	240,968	253	10.2	58,916	.244
Rail freight	28	6,070	217	.3	1,504	.248
Express	5	138	28	a	34	.246
Parcel post	48	309	6	a	85	.275
Truck collect	139	13,015	94	.5	3,600	.277
Rail collect	5	1,164	233	a	346	.297
Express collect	14	479	34	a	112	.234
Purchaser	1,035	363,670	351	15.4	83,303	.229
Total	5,012	904,183	180	38.2	\$207,526	\$0.230
<u>Bulk sizes</u>						
Packer	1	60	60	a	\$ 9	\$0.150
Truckline	39	69,127	1,772	2.9	10,162	.147
Rail freight	8	3,600	450	.2	696	.193
Truck collect	11	2,397	218	.1	448	.187
Rail collect	4	720	180	a	146	.203
Express collect	1	60	60	a	12	.200
Purchaser	20	36,335	1,817	1.6	5,797	.160
Total	84	112,299	1,337	4.8	\$ 17,270	\$0.154
All sizes	5,096	1,016,482	199	43.0	\$224,796	\$0.221

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 58 to equal 100 per cent.

Table 58.--All unfiltered honey, 1956--volumes shipped by type of carrier, f.o.b. returns, and average f.o.b. prices received by 9 packers

Carrier	No. of lots	Volume shipped (lbs)	Average volume per lot (lbs)	Per cent of total volume ^b	Total f.o.b. return	Average f.o.b. price per lb
<u>Consumer sizes</u>						
Packer	1,646	245,021	149	10.4	\$ 45,124	\$0.184
Truckline	1	900	900	a	171	.190
Parcel post	1	15	15	a	3	.200
Truck collect	33	16,536	501	.7	3,889	.235
Express collect	2	84	42	a	19	.226
Purchaser	270	47,605	176	2.0	10,078	.211
Total	1,953	310,161	159	13.1	\$ 59,284	\$0.191
<u>Bulk sizes</u>						
Packer	66	119,051	1,804	5.0	\$ 15,109	\$0.127
Truckline	7	85,845	12,264	3.6	9,988	.116
Truck collect	120	685,099	5,705	29.0	97,279	.142
Express collect	1	360	360	a	54	.150
Purchaser	47	147,856	3,146	6.3	18,723	.127
Total	241	1,038,211	4,308	43.9	\$141,153	\$0.136
All sizes	2,194	1,348,372	615	57.0	\$200,437	\$0.149
Grand total	7,290	2,364,854	324	100.0	\$425,233	\$0.180

^aLess than 0.05 per cent.

^bPercentages in this column must be added to those in Table 57 to equal 100 per cent.

Table 59.--All filtered honey, 1955--percentages of total volume sold,
by type of buyer and method of transportation used, 9 packers

Carriers	Whole- salers	Chains	Co-ops	Gift stands	Buyers		Honey packers	Bakers	Others	All
					Inde- pendents	Consumer sizes				
Packer	2.3	6.3	---	8.1	7.3	0.2	---	---	---	24.2
Truckline	13.9	3.2	0.2	2.6	1.1	---	---	0.1	a	21.1
Rail freight	.4	---	---	---	---	---	---	---	---	.4
Express	---	---	---	---	---	---	---	---	a	a
Parcel post	---	---	---	---	a	---	---	---	0.1	.1
Truck collect	.2	a	a	.2	.2	---	---	---	a	.6
Freight collect	---	---	---	---	---	---	---	---	---	---
Express collect	---	---	---	---	a	---	---	---	a	a
Purchaser	1.0	19.2	a	1.5	.6	.6	---	---	---	22.9
Boat	---	---	---	---	---	---	---	---	.1	.1
Total	17.8	28.7	0.2	12.4	9.2	0.8	0.1	0.1	0.2	69.4
<u>Bulk sizes</u>										
Packer	---	---	---	---	---	1.1	---	---	---	1.1
Truckline	0.2	---	---	---	a	.4	---	1.0	7.4	9.0
Rail freight	.3	---	---	---	---	---	.2	---	---	.5
Truck collect	---	---	---	---	a	a	---	---	a	a
Freight collect	---	---	---	---	---	---	---	---	---	---
Express collect	---	---	---	---	0.1	---	---	---	a	.1
Purchaser	---	---	---	---	---	19.9	a	a	a	19.9
Boat	---	---	---	---	---	---	---	---	---	---
Total	0.5	---	---	---	0.1	21.4	1.2	1.2	7.4	30.6
All sizes	18.3	29.7	0.2	12.4	9.3	22.2	1.3	1.3	7.6	100.0

^aLess than 0.05 per cent.

Table 60.--All unfiltered honey, 1955--percentages of total volume sold, by type of buyer and method of transportation used, 9 packers

Carriers	Buyers							Others	All
	Whole- salers	Chains	Co-ops	Gift stands	Inde- pendents	Honey packers	Bakers		
Consumer sizes									
Packer	1.6	8.7	---	5.3	0.8	---	---	0.1	16.5
Truckline	.9	---	---	---	---	---	---	---	.9
Rail freight	---	---	---	---	a	---	---	---	a
Express	---	---	---	---	---	---	---	---	---
Parcel post	---	---	---	---	---	---	---	a	a
Truck collect	a	---	---	a	---	0.2	---	---	.2
Freight collect	---	---	---	---	---	---	---	---	---
Express collect	---	---	---	---	---	---	---	---	.1
Purchaser	1.1	---	1.4	.5	a	---	---	a	3.0
Boat	.3	---	---	---	---	---	---	---	.3
Total	3.9	8.7	1.4	5.8	0.9	0.2	---	0.1	21.0
Bulk sizes									
Packer	8.5	0.1	---	0.1	0.1	1.6	2.5	---	12.9
Truckline	.1	---	---	---	---	6.2	---	---	6.3
Rail freight	---	---	---	---	---	---	---	---	---
Truck collect	20.4	---	---	---	---	---	12.5	---	32.9
Freight collect	---	---	---	---	---	---	---	---	---
Express collect	---	---	---	---	---	---	a	---	a
Purchaser	.4	a	---	.8	a	11.4	.2	a	12.8
Boat	6.8	---	---	---	---	---	---	7.3	14.1
Total	36.2	0.1	---	0.9	0.1	19.2	15.2	7.3	79.0
All sizes	40.1	8.8	1.4	6.7	1.0	19.4	15.2	7.4	100.0

^aLess than 0.05 per cent.

Costs of shipping honey by truckline

All shipments by truckline were separated by pack size and destination for the purpose of ascertaining the average cost to ship one case of any specific pack to various important markets. The results are shown in Tables 61 and 62 for the 2 years studied.

Shipping Costs Using Firms' Trucks

Method of calculating firms' truck costs

One of the purposes of this study was to determine the average f.o.b. returns to Florida packers for the many and varied pack sizes, and types of honey sold. The data necessary to secure this information were readily available for shipments which were transported by hired commercial carriers because shipping costs were known. However, there was the group of shipments, involving 9,275 individual lots of honey, which packers delivered in their own trucks. This group comprised 60.0 per cent of the total number of lots shipped in 1955 and 1956, but shipping costs were not known. Therefore, it was necessary to calculate the costs to each packer individually for each lot he delivered. In order to do this, data were obtained from the packers on the costs of operating their trucks, the time element involved in making deliveries, and the labor costs of driving. If the packer, himself, drove a truck for deliveries, and received a stipulated salary from the business, the time spent driving and delivering was prorated on that basis.

The step-by-step procedure of calculating individual packer's costs of delivering with their own trucks is in Appendix 3.

Table 61.--1955 average transportation cost per case of important consumer-size packs shipped by truckline to selected cities; shipping point Leesburg

Cities	Pack size										
	24/8- oz Q	12/1- lb Sv	24/1- lb Q	24/1- lb FB	24/1-lb Tumb	12/2- lb Q	12/2- lb Sq	24/2- lb Tin	6/5- lb RJ	12/5- lb Tin	
Birmingham, Ala.	\$ ---	\$0.302	\$0.602	\$0.598	\$ ---	\$0.543	\$0.697	\$ ---	\$ ---	\$ ---	
Avon Park, Fla.	---	---	---	.300	---	.270	.340	---	---	0.511	
Jacksonville, Fla.	---	.241	.396	---	---	---	---	---	0.478	.658	
Lakeland, Fla.	---	.319	.519	---	---	---	---	---	---	---	
Miami, Fla.	0.339	.304	.555	.426	0.566	.491	.597	0.671	---	---	
Orlando, Fla.	.200	.363	.336	.689	---	.611	---	---	.362	---	
Pensacola, Fla.	.362	.363	.689	.689	---	.359	---	---	---	---	
St. Petersburg, Fla.	.220	.387	.387	---	---	.372	---	---	.904	---	
Tampa, Fla.	.194	---	.341	.305	---	.385	---	---	---	.603	
Atlanta, Ga.	.300	.305	.547	---	---	.532	.558	---	.589	---	
Augusta, Ga.	.303	.281	.782	.537	---	.335	.705	---	.654	---	
Bowden, Ga.	---	---	.588	.599	---	.558	---	---	---	---	
Columbus, Ga.	.299	---	.535	---	.424	.540	.464	---	---	---	
Cornelia, Ga.	---	.328	.655	---	---	.644	---	---	---	---	
Marietta, Ga.	---	---	.521	.524	.461	.527	---	---	---	---	
Baltimore, Md.	---	.818	.969	---	1.121	.853	---	---	---	---	
New York City, N. Y.	---	---	.932	1.200	.891	.830	1.065	---	1.005	1.296	
Greensboro, N. C.	---	.398	---	---	.653	---	---	---	---	---	
Raleigh, N. C.	---	.285	.601	---	.523	---	---	---	.693	---	
Winston-Salem, N. C.	---	.533	.643	---	.622	.488	---	---	---	---	
Cleveland, Ohio	---	---	---	1.139	---	---	---	---	---	---	
Philadelphia, Pa.	---	---	1.023	1.065	1.010	.949	---	---	1.156	---	
Greenville, S. C.	---	---	---	---	.761	---	.884	---	---	---	
Orangeburg, S. C.	.327	.353	.554	---	.480	.520	---	---	---	---	
Spartanburg, S. C.	---	.336	.670	.587	---	---	---	---	---	---	
Knoxville, Tenn.	---	---	1.040	---	.541	.747	.617	---	.541	1.419	

Table 62.--1956 average transportation cost per case of important consumer-size packs shipped by truckline to selected cities; shipping point Leesburg

Cities	Pack size									
	24/8- oz Q	12/1- lb Sv	24/1- lb Q	24/1- lb FB	24/1-lb Tumb	12/2- lb Q	12/2- lb Sq	24/2- lb Tin	6/5- lb RJ	12/5- lb Tin
Birmingham, Ala.	\$ ----	\$0.346	\$0.649	\$0.655	\$0.722	\$0.604	\$ ----	\$ ----	\$ ----	\$ ----
Avon Park, Fla.	----	----	----	.293	----	.270	0.335	----	0.467	0.503
Jacksonville, Fla.	----	.240	.416	----	----	----	----	----	----	.582
Lakeland, Fla.	----	----	----	.556	.605	.583	.523	0.670	----	.802
Miami, Fla.	0.362	.338	.338	----	----	.257	----	----	.392	----
Orlando, Fla.	.206	.664	.664	.688	----	.589	----	----	----	----
Pensacola, Fla.	.284	.323	.343	.310	.343	.321	----	----	----	.652
Tampa, Fla.	.199	----	.621	.590	----	.557	.700	----	.725	----
Atlanta, Ga.	.317	.315	.638	.634	----	.580	----	----	----	----
Powden, Ga.	----	----	----	.552	----	----	----	----	----	----
Columbus, Ga.	----	----	----	.663	----	.613	----	----	----	----
Cornelia, Ga.	----	----	----	.607	----	----	----	----	----	----
Marietta, Ga.	----	----	----	----	----	----	----	----	----	----
Baltimore, Md.	----	.517	----	----	----	----	----	----	----	----
Buffalo, N. Y.	.722	----	1.193	----	----	1.075	----	----	1.355	----
New York City, N. Y.	----	.710	----	1.272	.849	1.240	1.531	----	----	1.724
Greensboro, N. C.	----	.360	----	----	----	----	----	----	1.006	----
Raleigh, N. C.	----	----	.918	----	.625	----	----	----	----	----
Winston-Salem, N. C.	----	.319	.652	----	----	----	----	----	----	----
Cleveland, Ohio	----	----	1.206	1.206	1.084	1.002	1.260	----	1.187	1.900
Philadelphia, Pa.	----	----	1.133	----	----	----	----	----	----	----
Greenville, S. C.	----	.295	----	----	.716	.675	----	----	----	----
Orangeburg, S. C.	.433	.389	.717	.607	----	----	----	----	----	----
Spartenburg, S. C.	----	----	----	----	----	----	----	----	.705	1.398
Knoxville, Tenn.	----	----	----	----	----	----	----	----	----	----
Richmond, Va.	----	.430	.817	.820	----	.753	----	----	----	----

The completion of calculating the costs of individual firms to deliver honey with their own trucks supplied the remaining data necessary to complete calculations of f.o.b. returns for each lot sold. This, also, was the source of data needed to develop the actual cost experience of individual packers.

Actual truck costs for individual firms

A summary of the cost experience of operating trucks is presented in Table 63 for 2 years. The results for one-day and two-day trips are shown separately for packers who had such experience.

Packers B and G were the only ones who made two-day overnight trips. These trips occurred during the winter months when many gift stands were open for the winter tourist season. (Packer B specialized in popular tourist items such as Servers, 2 1/2-lb Tins, 5-lb Tins, and comb packs; and processed the honey by filtering. Packer G, however, did not filter, nor did he cater specifically to the tourist trade. He served gift stands, large chains, and independents, but did not handle Servers or 2 1/2-lb Tins.)

A comparison of the two firms was interesting because of the differences in their method of serving customers, and the results in terms of costs and f.o.b. returns. The annual volume of firm G was more than double that of firm B. However, the number of individual lots handled by the smaller firm B was about five times that of G, with the result that the average lot handled by B weighed 32 pounds compared to 307 pounds for G over two years for all sales.

Table 63.--All honey, 1955 and 1956--actual transportation cost experience of packers making deliveries with their own trucks on one- and two-day trips

Packer	No. of trips per year	Total miles traveled	Total lbs delivered	Average lbs delivered per mile traveled	Average delivery cost per lb	Average f.o.b. price received per lb
<u>1955</u>						
<u>One-day trips</u>						
B	10	2,804	9,137	3.3	\$0.046	\$0.178
C	32	7,040	212,917	30.2	.006	.144
G	17	4,985	112,494	22.6	.009	.153
H	14	840	21,166	25.2	.017	.186
<u>Two-day trips</u>						
B	13	4,440	19,384	4.4	\$0.046	\$0.195
G	3	900	17,634	19.6	.014	.156
<u>1956</u>						
<u>One-day trips</u>						
B	5	1,402	7,390	5.3	\$0.029	\$0.212
C	32	7,067	184,587	26.1	.008	.150
G	18	5,156	140,778	27.3	.007	.162
H	11	660	12,493	18.9	.021	.146
<u>Two-day trips</u>						
B	15	5,100	29,549	5.8	\$0.035	\$0.218
G	2	600	15,612	26.0	.010	.159

The inefficiency in the distribution method of B was further reflected in his costs of delivery (see Table 63). On one-day trips in 1955, B delivered an average of 3.3 pounds of honey per mile traveled at an average cost of 4.6 cents per pound; on two-day trips the average pounds delivered per mile was 4.4, also at a cost of 4.6 cents per pound. Firm G, on the other hand, delivered 22.6 pounds per mile at an average cost of 0.9 cents per pound for one-day trips, and 19.6 pounds per mile at an average cost of 1.4 cents per pound for two-day trips. Similar costs for both firms were lower in 1956. However, B's average was still considerably higher than firm G and the others.

The high costs of delivery for packer B, on one-day and two-day trips, was attributed to the type of customer he served and the special type of service he gave them. Most gift stands, as a rule, are very small operations and have very little space to carry sizeable inventories. Packer B catered to this type of trade and sold them what they needed to replenish their display shelves. In many instances this would mean selling a few jars. In this type of customer service it required many deliveries at high cost to attain any sizeable total volume of sales. Most packers sold only whole-case lots and were reluctant to split up a case. Those who shipped by commercial carrier preferred not to ship under 200 pounds gross weight, or 150 pounds net, because freight rates started at a minimum for 200 pounds. Therefore, costs of delivery for smaller lots would place their products in a noncompetitive price position. This has been discussed previously, but it is repeated to emphasize the comparison with the method of distribution used by packer B.

Further, the average daily volume per one-day trips for packer B was 914 pounds compared to 6,617 for G in 1955, and 1,478 pounds for B versus 7,821 for G in 1956. Firm C averaged approximately 6,200 pounds per one-day trip for the two-year period, and firm H averaged approximately 1,350 pounds. The important and determining factor was B's extremely low average of pounds delivered per mile traveled when compared to the experience of the other firms. For all trips, one-day and two-day, the highest rate attained by B was 5.8 pounds per mile traveled for two-day trips in 1956. The lowest rate for any of the other three firms was H with 18.9 pounds in 1956. As a result, B's average cost to deliver one pound of honey was the highest of the four firms under discussion. However, although firm B had the highest average cost of delivery per pounds, it had the highest average f.o.b. return per pound. This happened because B sold more of the higher-priced items and also received better prices for his products (and extraordinary services) than did the other packers.

The calculation of packers' costs of operating their own delivery systems also supplied data for an analysis of trips of short duration and mileage per round trip. For this analysis, the cost experiences of firm B and another small firm, I, were used and are presented in Tables 64 to 66.

From the analysis of packer B's cost experience for short delivery trips (Table 64), it was discovered that his average cost to deliver one pound was greatly reduced, when compared to his cost on trips of one- and two-day duration. It was 1.2 cents per pound in

Table 64.--All honey, 1955 and 1956--actual transportation cost experience of Packer B making deliveries with his own truck to various distances from his plant

Distance per round trip (miles)	No. of trips per year	Total miles traveled	Total lbs delivered	Average lbs delivered per mile traveled	Average delivery cost per lb	Average f.o.b. price per lb
<u>1955</u>						
6	6	36	1,609	44.7	\$0.005	\$0.223
12	5	60	1,249	20.8	.008	.210
16	30	480	8,675	18.1	.009	.189
20	38	760	15,851	20.9	.008	.220
28	23	644	13,051	20.3	.008	.214
32	1	32	904	28.3	.007	.276
44	1	44	141	3.2	.045	.225
82	4	328	1,782	5.4	.025	.160
112	17	1,904	8,695	5.1	.027	.160
Total	125	4,288	52,957	12.4	\$0.012	\$0.201
<u>1956</u>						
6	1	6	187	31.1	\$0.006	\$0.240
10	2	20	389	19.5	.010	.218
12	1	12	269	22.4	.007	.217
16	15	240	3,770	15.7	.010	.207
20	40	800	15,183	19.0	.009	.218
24	2	48	1,218	25.4	.007	.243
28	12	336	7,521	22.4	.008	.234
32	1	32	906	28.3	.007	.291
82	3	246	1,469	6.0	.023	.182
112	9	1,008	5,203	5.2	.027	.186
Total	86	2,748	36,115	13.1	\$0.012	\$0.217

Table 65.--All honey, 1955--actual transportation cost experience of Packer I making deliveries with his own truck to various distances from his plant

Distance per round trip (miles)	No. of trips per year	Total miles traveled	Total lbs delivered	Average lbs delivered per mile traveled	Average delivery cost per lb	Average f.o.b. price per lb
a	7	2	868	496.0	\$0.002	\$0.177
a	5	2	184	109.9	.006	.193
1	2	2	43	21.5	.014	.165
3	36	108	7,554	69.9	.003	.176
4	3	12	456	38.0	.006	.171
5	15	75	1,701	22.7	.008	.179
6	32	192	4,664	24.3	.008	.176
7	1	7	150	21.4	.009	.184
8	3	24	689	28.7	.007	.170
9	9	81	3,773	46.6	.005	.182
10	5	50	1,081	21.6	.008	.176
11	1	11	393	35.7	.006	.180
12	13	156	2,890	18.6	.009	.175
13	1	13	718	55.2	.003	.175
15	5	75	1,384	18.5	.010	.180
16	2	32	775	24.2	.007	.187
17	2	34	661	19.4	.009	.173
18	3	54	1,741	32.3	.006	.181
40	6	240	2,191	9.1	.017	.159
43	1	43	701	16.3	.009	.170
46	6	276	2,599	9.4	.016	.172
50	4	200	2,028	10.1	.014	.168
53	3	159	870	5.5	.026	.167
56	1	56	1,217	21.7	.007	.179
Total	166	1,904	39,331	20.7	\$0.008	\$0.176

^aOne-third of a mile or less from plant.

Table 66.--All honey, 1956--actual transportation cost experience
of Packer I making deliveries with his own truck
to various distances from his plant

Distance per round trip (miles)	No. of trips per year	Total miles traveled	Total lbs delivered	Average lbs delivered per mile traveled	Average delivery cost per lb	Average f.o.b. price per lb
a	5	1	771	771.0	\$0.002	\$0.218
a	4	1	351	351.0	.004	.205
2	2	4	284	71.0	.004	.231
3	51	153	9,524	62.2	.004	.196
4	2	8	114	14.3	.012	.206
6	22	132	4,950	37.5	.005	.198
7	1	7	387	55.3	.004	.205
8	1	8	207	25.9	.007	.206
9	7	63	3,504	55.6	.005	.182
10	21	210	4,134	19.7	.008	.193
12	15	180	3,979	22.1	.007	.210
13	1	13	117	9.0	.018	.159
14	1	14	414	29.6	.006	.207
15	2	30	631	21.0	.008	.210
16	7	112	2,226	19.9	.009	.200
22	11	242	2,221	9.2	.016	.205
25	3	75	1,528	20.3	.008	.200
33	1	33	566	17.2	.010	.189
34	2	68	836	12.3	.012	.208
40	2	80	540	6.8	.021	.163
50	8	400	5,005	12.5	.011	.198
56	1	56	1,415	25.3	.006	.202
60	1	60	1,031	17.2	.009	.170
62	1	62	609	9.8	.016	.184
72	1	72	1,542	18.6	.008	.199
Total	173	2,084	46,681	22.4	\$0.007	\$0.197

^aOne-third of a mile or less from plant.

both years for all short trips combined. This occurred because he sold and delivered more pounds for every mile traveled. The over-all average cost of delivering one pound for all of B's sales short and long trips combined, was 2.4 cents in 1955 and 2.3 cents in 1956.

Packer I conducted a similar type of operation to that of B, selling principally to gift stands. All of I's deliveries were short hauls, the longest being 36 miles from his plant (72 miles round trip) in 1956, and the nearest within one-third of a mile (Tables 65 and 66). The average pounds delivered per mile traveled by packer I on all sales over two years was 21.6, and for packer B it was 12.7. The over-all average cost of I to deliver one pound of honey for all trips was 0.8 cent in 1955 and 0.7 cent in 1956.

The average net return per pound to packer B was 11.9 cents in 1955 and 12.9 cents in 1956. Packer I received a net of 10.1 cents per pound in 1955 and 12.1 cents in 1956.

It is believed that packer B could reduce his unit cost of delivery by making less frequent deliveries, and attempting to increase volume for each delivery and mile traveled, by using a more aggressive approach in his role as a salesman for his products.

CHAPTER VII

SOME MARKETING PROBLEMS AND SUGGESTIONS

The Importance of an Active Honey Packers Association

There are a number of problems facing the honey-packing industry. They will be reviewed here briefly and developed further in the later sections of this chapter with some possible solutions, and suggestions which may be effective in dealing with them.

One of the most important problems is the rising costs of materials and labor. As costs rise in other segments of the country's economy, the effects sift down to honey packing, as well as to other small industries. That is on the buying side. Honey packers are also confronted with problems on the selling side when they vie for the consumer's food dollar in competition with other needs in the human diet. In order to win its share of the food dollar, it will be necessary for the Florida honey-packing industry to produce a superior product--one that will meet specific grade standards. Such standards should be adopted, and could be based on those recommended by the U. S. Department of Agriculture.¹

¹U. S. Department of Agriculture, Agricultural Marketing Service, United States Standards for Grades of Extracted Honey, April 16, 1951.

Individual packers have suggested there is a need for advertising or promotion of Florida honey. However, as a group, they have been unable to agree upon the form it should take and on a suitable method of raising the necessary funds to do it.

The part that the Florida Honey Packers Association can take in the solution of these problems and the development of programs to assist in the expansion of the Florida honey industry is most important. Some problems will only be solved or alleviated by the concerted action and cooperation of packers. It will require a voluntary exchange of ideas and contributions of information pertaining to the industry--ideas and information which can be mutually advantageous to all members without destroying competition.

Developing Cost Ratios

Under a free-enterprise system, management must efficiently and economically operate its plants so that it can produce a product competitively for sale. If they cannot produce a competitive product for sale and meet all costs, they will not be able to produce at all in the long run.

In order to produce efficiently, economically and competitively, the honey packer should have some yardstick, some measurement to compare his costs with others in the industry. All the packers interviewed for this study expressed an interest in ascertaining their own costs of packing and having the average costs of a group as a means of comparison. Therefore, it is proposed that through the Florida Honey Packers Association a plan be urged upon members to cooperate in setting up a standardized

accounting system for use throughout the industry. The purpose of a uniform system would be to facilitate the development of cost ratios for the industry and for each packer individually. The cost ratios could be developed on the basis of various costs outlined in the chapter on cost of packing in this work, or along lines which packers would deem of greater importance to them in the management of their plants. Ratios could be calculated for the industry annually or at some other preferred interval.

The adoption of a workable plan as described may lead to important changes in the methods of packing honey because inefficiencies would be brought to light. It may also result in changes to specialization in some phase of the industry (production, packing or distribution), or to specialization in packing of specific items. Some packers may prefer to specialize in novelty items, or those catering to the gift and tourist trade which require much hand labor. Others may prefer to pack items which are in greatest demand by the broad consumer market, such as the ones listed in Table 7 in the text. It is believed that a change to the latter would result in the introduction of more labor-saving machinery, not yet being used in the industry, such as automatic labelers, automatic cappers and roller conveyors. Automatic packing machines would be more adaptable to a few specific sizes and types of containers than to the great variety now being used by packers. A reduction in the number of pack sizes and the use of mass-production methods would lower costs of packing, and permit the Florida packers to become more competitive in distant markets now eliminated by transportation costs.

Better Market Price Reports

A common complaint heard in interviews with packers during the collection of data for this study was that honey market news reports on prices of Florida honey were inaccurate. The prices reported by the responsible government agencies were those which were reported to the agencies by correspondent beekeepers and honey handlers. The price data were collected and published for the benefit of all members of the industry to aid them in making their decisions on prices when selling or buying honey.

Therefore, if beekeepers and honey handlers are to be aided in making better decisions on pricing, it is important that all members of the industry cooperate with governmental agencies by supplying the best available information on prices and sales. It is proposed that the Florida Honey Packers Association plan and carry out a campaign to inform buyers and sellers of honey that under competitive conditions the opportunities of obtaining an equilibrium market price can be enhanced by a greater and freer exchange of information and knowledge of the market. It would be to the advantage of all members of the industry to supply price data to State and Federal market news agencies for more frequent publication in the same manner that prices are published for other agricultural products in the leading newspapers.

Proposed Marketing Agreement

At the time this study was undertaken, the honey-packing industry in Florida was operating without any set standards of quality or grade agreed upon by members of the industry. Control over labeling

was not possible because tests had not been developed which could differentiate the honey obtained from many and various sources of nectar with one exception--Tupelo. A common complaint was that some honey, being sold as Orange Blossom, was unfairly priced at retail outlets at less than cost of acquiring, processing, and distributing Orange Blossom. In the absence of a marketing agreement, packers had (and have) no recourse to combat what they considered unfair trade practices.

Therefore, it is proposed that the Florida Honey Packers Association, in cooperation with producers, take the necessary steps to have State legislation enacted for the purpose of regulating the marketing of Florida honey by a marketing agreement or order. Precedent has been established by previous legislation enacted to control the marketing, handling, and distribution of celery and sweet corn grown in Florida. It is believed that a State marketing order would be preferable to a Federal order since provision could be made in a State order for the establishment of plans and programs for advertising and sales promotion. Federal orders do not have such provisions.

Under the proposed enabling legislation and issuance of a marketing order, an administrative committee (or advisory board) representing both producers and handlers would have the duties and powers to administer the provisions of the order and recommend rules and regulations pursuant to the order. Grievances on pricing could be covered by inclusion of a clause similar to one in the marketing order in effect at present in California, which states under Article III, Section A,

PartI--"The sale of extracted honey by any person directly affected by this marketing order at less than cost or at discriminatory prices in violation of the provisions of the Unfair Practices Act is hereby declared to be an unfair trade practice and is prohibited by this Marketing Order."²

The committee could provide for the setting of grades and standards; they could provide for assessment to acquire funds for administration of the order, or for expenses to advertise and promote the sale of honey; they could require producers and handlers, subject to the provisions of the order, to maintain books and records of their operations under the order, and to furnish such records to authorized representatives when needed by the administrative committee to perform its duties in administering the provisions of the order.

The grades (or standards) for Florida honey should preferably be the same as those established by the U. S. Department of Agriculture. Some types or grades serve a better purpose for over-wintering bee colonies than to be placed on the market since sugar for over-wintering would cost more. In addition, the blending of substandard grades with the better grades simply degrades good honey.

Advertising

A number of Florida packers believe there is a need for advertising Florida honey. However, there are two main problems related to

²State of California, Department of Agriculture, Bureau of Markets, Marketing Order for Extracted Honey, as Amended, February 1, 1954.

such advertising. The most difficult one is the raising of funds necessary to advertise and the second is the methods of advertising which will be effective in creating a greater demand for it.

There are two things which favor an advertising program for Florida Orange Blossom honey--(1) Florida Orange Blossom honey is unique in that it differs from any other kind except California Orange Blossom. It is distinctive in quality and appearance. (2) The production of California Orange Blossom honey is so small that it does not compete with Florida's natural market--the states east of the Mississippi River.

Proposed methods of collecting advertising funds

One method of acquiring funds, which would also be a means of advertising, is that used by the Florida Fern Growers Association. It is simple, and consists of printing stamps which would be sold to packers for the purpose of stamping every case of honey. The stamps would bear the inscription (or one similar to it)--"This Orange Blossom Honey was produced in Florida, and packed by a member of the Florida Honey Packers Association." The stamps would be sold by the secretary of the association at a price decided by members. The stamps, in themselves, would be a form of advertising and, in addition, funds would be acquired for financing other types of advertising.

Another method, a form being used by the Florida Cattlemen's Association, would be voluntary contributions by members of the industry. It could be carried out by members of the Florida Beekeepers Association alone, or in cooperation with members of the Florida Honey

Packers Association. Under this plan, beekeepers would voluntarily contribute a specified percentage of their sales income from honey. The contributions would be deducted by packers (or other raw honey buyers) on the authorization of the beekeepers, and funds so collected would be sent at specified intervals to the secretary of the beekeepers association. The cooperative plan, it is believed, would be more desirable because it would promote better public relations between beekeepers and packers (or honey buyers), and perhaps increase the amount of funds, depending on the percentages collected. Under this plan, the beekeepers would authorize packers (or honey buyers) to deduct a specific percentage from their sales income and the packers would match this with a like amount, or some other agreed percentage. The funds so collected would be sent at specified intervals to an appointee of the two groups. In both plans, the beekeepers would receive a separate receipt, or verification, of amounts deducted for advertising which they, in turn, could submit to the appointed collector of funds as a form of control.

The last proposal, and perhaps one which would have the least appeal, because it would be involuntary, would be in the form of an assessment under the provisions of a State marketing agreement. This plan would be used if the administrative committee of a marketing agreement decided that funds should be collected for the purpose of advertising, or sales promotion. However, raising advertising funds in this manner would delay the start of any program since State legislation must first be passed to create an enabling act for a marketing agreement. It would take additional time to put such a plan into

operation. Under the other proposed plans, an advertising program could be started within a brief period of time. An important feature of any method of raising funds, if adopted, is that it be a continuing source of funds, so that advertising can be planned for future use in the knowledge that the necessary funds will be available.

Proposed methods of advertising

The American Honey Institute has been instrumental in promoting the sale of all honey throughout the United States by frequent news releases and general advertising in connection with National Honey Week. The Florida Honey Packers Association has been doing similar work in news releases in cooperation with the Florida Development Commission. However, the ideas here proposed would take a more direct approach, with greater emphasis on Florida honey only.

The name "Florida," in the minds of many people, who have never been fortunate enough to visit this beautiful State, is a magic word. To them it connotes a paradise, a land of health, happiness, and sunshine, and for that reason it is believed that the word "Florida" affixed to, or being part of the name of a food product such as honey would have great advertising appeal.

Therefore, it is proposed that all drums, cans, cartons, tins, bottles, and packers' trucks, used for the sale and transportation of Florida honey, be labeled "Florida Orange Blossom Honey," or "Florida Flowers Honey," etc., plus the packer's name and location. Every container and truck so labeled would, in itself, be a continuing advertisement for Florida honey. Further, it is proposed that packers and

beekeepers identify their plants, especially those near principal highways, with attractive signs announcing their businesses as packers, or producers, of Florida Orange Blossom honey, and inviting visitors into their plants. Each visitor could be presented with a souvenir booklet of honey recipes, and perhaps a small sample of strained or comb honey. The sample of strained honey could be put up in individual portions in the small transparent plastic containers called Krafts P-C's, which currently are being used to dispense jellies and syrups in one-half ounce and one and one-half ounce sizes. Some citrus packing plants use a visitation method of advertising and creating good will with the public. Tourists, having visited honey plants, would carry the story of Florida Orange Blossom honey home to their friends. Also, many visitors would be tempted to make purchases on the premises, or give mail orders. Visiting times could be limited to certain hours of the day, and on certain days of the week. Recipe booklets and samples could be supplied at cost by a packer's committee for advertising, and the same booklets and samples could be used in other methods to be discussed herein.

Another idea for advertising would be a direct appeal to our current and future homemakers. The proposal is that honey be contributed for demonstration to home economics classes in high schools and home demonstration clubs in order to familiarize those, who may become prospective buyers, with the actual methods of baking cakes and cookies with Florida honey. Each container so contributed, would carry a label (or a similar one) saying "This Florida Orange Blossom Honey (or other type) was produced and packed in Florida, the 'Land of Sunshine.'

It is contributed by the members of the Florida Honey Packers Association for educational purposes and demonstration of its uses to home economics classes."

Advertising could also be in the form of "point of sale" placards in colors, picturing orange blossoms, for distribution to retail grocers to point up "special" sales of Florida Orange Blossom honey. This could be for honey alone, or for a "combination special" of honey and pancake (or waffle, or biscuit) mix. Variations of this "point of sale" method of advertising could be the distribution of recipe booklets with each jar of honey, or the distribution of small plastic container samples of honey with each package of pancake mix. Promotions of this type would, of necessity, be carried out by individual packers, or a group of packers, dealing with the same retail stores or wholesalers.

Another idea is the printing of Florida honey recipes on labels or in the form of tiny 2" by 2" folded booklets which could be attached to the consumer packs.

Displays of cakes and cookies made with honey and small portions served by a lady demonstrator to customers in supermarkets would be another method of promoting the use of Florida honey. The best time for such promotions would be shortly before holidays, such as Thanksgiving and Christmas, when many housewives like to make special treats for their families and friends. The demonstrator would have Florida honey recipe booklets for those desiring them.

The purposes of the proposed methods of promoting and advertising Florida honey would be to associate honey, in the consumer's mind,

with the basic necessary foods in the human diet as contrasted to the high-priced novelty and luxury concept associated with honey when it is packed in expensive ceramics and fancy packs of all kinds. No doubt, there will continue to be a limited market for novelty packs for the tourist and gift trade. However, it is believed that in order to increase demand for Florida honey the advertising and promotion appeal should be directed to the general consumer in an effort to make honey a common household food rather than an occasional luxury.

CHAPTER VIII

SUMMARY AND CONCLUSION

The earliest available records of the United States Department of Agriculture showed a production of 1,000,000 pounds of honey in Florida in 1935. A peak production record of 18,036,000 pounds was made in 1957 with a farm value of \$3,579,000. In the 20-year period from 1939 through 1958, there was an average annual increase of 6.8 per cent in production. Approximately one-half is from citrus which is the most important source of nectar in the State.

Purpose and Method of Study

The purpose of the study was to provide data on the marketing practices of the industry in relation to methods and costs of packing, on methods of selling, on market outlets and areas of distribution, on seasonal distribution to markets, on methods and costs of transportation, and on average prices received by packers.

The plan of study called for the collection of data from 20 commercial honey packers for 2 years, 1955 and 1956. However, complete data for 2 years were available from only 9 firms and these were used as the study sample. Data were obtained from sales invoices and book-keeping records. After preliminary calculations were completed, the data were transferred to IBM accounting cards for tabulations, and from these the cost of packing and distribution analyses were prepared.

Characteristics of Nine Florida Honey Packing Plants

The 9 firms studied varied in their methods of operation and in the number of items packed. Five firms were fully integrated from the production of honey to delivery in retail markets, 3 produced some of the honey they packed, and one specialized in packing only. Five of the firms used a filtering process and 4 strained through cloth. Two firms had semiautomatic filling machines. Other work, such as capping, labeling, and casing, was done by hand in all firms.

At the time of this study the industry had not developed standardization of grades or pack sizes. The 9 firms were using 62 different types of containers ranging from 3-ounce glass jars to 650-pound steel drums. They packed 10 different kinds of honey and sold an average of 96 individual items in the 2-year period. Orange Blossom, Tupelo, and Clover were the only ones labeled by floral source.

The total volume handled by the firms studied was 2,531,727 pounds in 1955 with an f.o.b. value of \$428,046. In 1956 it was 2,364,854 pounds valued at \$425,233.

Filtered honey accounted for 61.8 per cent of the sales of 9 firms in 1955, and was 43.0 per cent in 1956.

Among the different varieties of honey sold, Orange Blossom (plain and comb in all size packs) had the greatest volume, 43.9 per cent for 2 years. In the same period, consumer sizes of Orange Blossom accounted for one third of all sales. Light Amber ranked second in volume for all sizes, but was in greater demand in the bulk sizes. Filtered Orange Blossom and Light Amber greatly exceeded the unfiltered in sales volume.

In container sizes and types, the 12/5-lb Tin, the 24/1-lb Q jar, and the 12/2-lb Q jar were used to pack 52.2 per cent and 53.0 per cent (for 2 years) of all consumer-size packs.

Methods Used and Cost of Processing and Packing Honey

Honey can be stored for long periods since it is very stable physically, and is not considered a perishable commodity. It is best stored in sealed drums to prevent absorption of moisture and the development of yeasts which cause fermentation. Its color darkens with age, and since consumers prefer light colored honey, the length of storage is an important factor considered when packing table grades.

The cleaning of debris and foreign matter from honey was accomplished by filtering through a filter press, or straining through a cloth, after heating to 130° - 140° F. for ease of flow. Heating to this temperature also served as pasteurization to eliminate bacterial growth if present.

The costs of packing 4 important sizes of containers were compared. It was found that on a pound basis, the average cost for 2 years was 9.6 cents for the 1-lb Q jar, 7.5 cents for the 2-lb Q jar, 5.1 cents for the 5-lb Tin, and 2.5 cents for the 60-lb Can. The firms, which filtered, had lower costs as a group for these sizes than firms which did not filter.

The cost expense accounts were grouped under 5 major categories-- materials, labor, other direct operating, indirect operating, and administrative. Materials accounted for the largest share of all costs, ranging from 41.5 per cent to pack 60-lb Cans of unfiltered, to 57.9

per cent to pack 1-lb Q jars filtered, in 1955. The lowest cost percentage was for "other direct costs," which included power, lights, water, repairs, miscellaneous supplies, and fuel oil.

The packing costs, as between firms, were affected by differences in types of packing materials, by lack of standardization of containers, by differences in methods of packing and plant lay-out, and by differences in wage rates and productivity of workers.

Economies of scale could not be demonstrated because of the small number of firms in the study sample and their heterogeneous methods of operation.

Selling Policies and Practices

Packers made their decisions on pricing in different ways. Some based prices on the previous season's prices, or their competitor's prices. Others were more cost conscious and used costs as a reference point from which to test the market and make offers to sell.

The methods of sale used were simple and uncomplicated. The two principal types used were f.o.b. and delivered sales. Combined, they were approximately 99 per cent of all sales for 2 years studied. The others were consignments and custom packs.

The average f.o.b. prices received per pound of honey through brokers' delivered sales were higher than from packers' direct sales (f.o.b. and delivered) because brokers sold a greater percentage of the higher priced packs. However, net returns per pound were higher from brokers' delivered sales of only the 12/5-lb Tins of Light Amber--being 11.8 cents, versus 8.2 cents and 11.8 cents from packers' f.o.b. and

delivered sales respectively, in 1955. In 1956, brokers sold 2 items at higher net returns--12/5-lb Tins of Light Amber and 24/1-lb Q jars of Orange Blossom Comb.

Packers used 20 different rates of discount. The most used were 1.0 or 2.0 per cent rates for prompt payment. No discounts were granted or taken on over 50 per cent of sales in both years. The practice of granting high discount of 10, 15, and 20 per cent to customers for f.o.b. pick-up and large volume orders was being discontinued in favor of price schedules on a straight f.o.b. or delivered basis.

Brokers' sales accounted for approximately 10 per cent of 9 packers' total sales, of which 59 per cent were at a 5.0 per cent commission rate. Brokers sold lesser volumes at commission rates ranging from 3 to 20 per cent. The average commission paid per pound ranged from 0.9 cents to 2.1 cents over 2 years for important consumer sizes.

In summary of 91 items sold in 1956, it was found that packers had sold honey at average net returns ranging from a loss of 17.7 cents per pound for the 48/3-oz EE of unfiltered Orange Blossom to a high return of 68.4 cents for the 12/3-oz Crate of filtered Orange Blossom.

Distribution

There were 6 types of buyers who took the major portion of honey sold by 9 packers. Corporate chains led the list in both years in volume of consumer sizes. Wholesale grocers ranked second in 1955 followed by gift stands. In 1956, gift stands ranked second and wholesalers third. Other important buyers were independent grocers, bakers, and other honey

packers. The principal bulk buyers were wholesalers and other honey packers.

Brokers' sales of consumer-size packs were in largest volume to wholesalers, whereas packers' direct sales were in largest volume to corporate chains.

The consumer-size pack sold in greatest volume to wholesalers and chains was the 24/1-lb Q jar. Gift stands and independents took the largest amounts in 12/5-lb Tins.

The heaviest concentration of market areas was within Florida. Shipments in the State were to 117 different towns and cities in 2 years and was over 50 per cent of all honey sold by 9 packers. Other states getting large volumes were Georgia, South Carolina, North Carolina, New York, Virginia, Michigan, and Alabama. The majority of markets were within 500 miles of Leesburg as an approximate central shipping point. The leading markets in Florida on the basis of volume were Miami, Tampa, Jacksonville, and Umatilla. New York City and Onsted, Michigan, received the largest shipments of bulk honey.

On a seasonal basis, data for 2 years developed a definite pattern or cycle of distribution for consumer packs. In Florida, there was a high volume of sales in the winter and low in the summer, with peaks corresponding to the coming and going of winter visitors in the fall and spring. In other states the seasonal pattern was the opposite of Florida--low in the winter and high in summer.

The seasonal purchasing pattern of important buyers of consumer packs varied. Wholesalers bought large amounts during early spring

and summer. Chains bought their largest volumes in December and again in March and April. Gift stands took peak volumes in November and March. Independents, co-op chains, bakers, and other honey packers showed no definite seasonal buying patterns. Similarly, bulk sales followed no definite pattern of seasonal distribution.

Shipping Methods and Transportation Costs

Wholesalers preferred to receive shipments by truckline prepaid since in that way they would know total costs of the product delivered to their door. The truck-collect method was used mainly by those buying unfiltered bulk honey. Chain stores preferred to pick up their purchases at the packing plants because their trucks made deliveries at the same time to their retail outlets. Gift stands and independents were serviced mainly by packers who operated their own jobbing routes.

The average cost of delivering one pound of honey by packers' own trucks varied greatly, depending on the type of service rendered by the packer and the number of pounds he was able to sell per mile travelled. Packer B had the highest over-all average cost of 2.4 cents per pound for all sales over 2 years. He specialized in serving gift stands, travelled many miles, and made many deliveries. However, he sold an average of only 7.4 pounds of honey for every mile travelled. All other packers averaged over 19 pounds per mile travelled with correspondingly low costs of delivering.

Some Marketing Problems

Florida's honey packers are faced with ever-rising costs of materials and labor. Like those in other industries, they must determine their inefficiencies and find ways of correcting them.

Up to the present time, packers, as a group, have not adopted a set of specific grade standards for Florida honey. Though, the United States Department of Agriculture has developed standards, few of the Florida packers are using them. Some packers have expressed a grievance in the form of questioning the ability of some retail gift stands to sell true Orange Blossom at the low prices advertised along the highways in some areas of the State. Also, no attempt has been made to standardize container types or sizes.

Packers have been dissatisfied with price and market reports, but these reports have been based on data submitted by some of the packers.

A few packers have expressed a need for advertising Florida honey and informing consumers of its various uses as a food item. However, only those few agreed on a form of promotion and were willing to contribute funds for that purpose. There was no collective action by packers as a group.

Conclusion

At present the Florida honey industry is disorganized. However, it is believed that the Florida Honey Packers Association can become a force in bringing about concerted action and cooperation that will benefit all members. In the matter of market news reports, if more packers

would supply price data to market news agencies, the reports would be of greater value to the industry.

A forward step for more efficient management of packing plants would be the development of industry costs of packing and cost ratios. The cooperation of all packers would be needed to adopt a standardized accounting system from which the necessary information could be more easily and quickly calculated.

It is believed that packing costs could be lowered by improving plant design, by the greater use of labor-saving machine-fillers and conveyors, and by the use of fewer pack sizes which would be adaptable for mass-production packing.

Since there are no prescribed standards for honey, for pack sizes, for processing methods, or selling practices, it is believed that a marketing order would aid in correcting these faults. However, the members of the industry must take the initiative to have legislation enacted for such a program.

There should be a well organized and financed plan for effective advertising of Florida honey and it will require much effort to put it in operation. It is suggested that the industry consider legislation under a State Marketing Order which would enable the industry to support an advertising program on an equitable basis.

APPENDIX 1

OTHER CONTAINERS USED BY HONEY PACKERS

Consumer Sizes

12/3-oz Cr Bkt -- A case containing 12 Cracker Baskets, each Cracker Basket holding three, 3-ounce, elephant ear, glass jars of honey or honey product.

12/3-oz Crate -- A case containing 12 miniature orange crates, each crate holding four, 3-ounce, barrel-shaped glass jars, one of which contains honey and the others preserves.

48/3-oz Bbl -- A case of 48, 3-ounce, barrel-shaped glass jars.

48/3-oz EE -- A case of 48, 3-ounce, elephant ear, glass jars.

12/4-oz CPot -- A case of 12, 4-ounce, ceramic pottery containers of various shapes.

12/5-oz Buz -- A case of 12, 5-ounce, ceramic honey servers, shaped like a bee.

24/6-oz Jug -- A case of 24, 6-ounce ceramic pottery jugs.

12/8-oz Jug -- A case of 12, 8-ounce ceramic pottery jugs.

12/8-oz PTPit -- A case of 12, 8-ounce ceramic pottery pitchers decorated with a palm tree design.

12/8-oz Plas -- A case of 12, 8-ounce round plastic containers.

12/8-oz CPot -- A case of 12, 8-ounce ceramic pottery containers of various shapes.

12/8-oz S&P -- A case of 24, 8-ounce glass containers with plastic salt and pepper tops. They are sold in pairs and when empty can be used as salt and pepper shakers. Twelve jars contain honey, the other twelve contain some form of preserves.

12/8-oz SvSt -- A case of 24, 8-ounce glass containers sold in pairs on a tray. Twelve containers have plastic server-type tops and are filled with honey. The other 12 are condiment servers with plastic spoons, and are filled with preserves.

- 24/8-oz Beehv -- A case of 24, 8-ounce ceramic skep beehives.
- 24/8-oz FB -- A case of 24, 8-ounce glass, globe-shaped jars generally referred to as fishbowls.
- 24/8-oz OBowl -- A case of 24, 8-ounce glass, globe-shaped jars painted an orange color.
- 24/8-oz Sv -- A case of 24, 8-ounce table servers. The glass jars have plastic server tops with a no-drip spout. A metal slide in the top releases the honey when withdrawn.
- 12/10-oz OBPit -- A case of 12, 10-ounce ceramic pottery pitchers, decorated with an orange blossom design.
- 24/14-oz OJ -- A case of 24, 14-ounce cylindrical glass jars generally used as olive jars in the food-packing industry. Principle use is for comb packs in the honey industry.
- 24/14-oz Bukt -- A case of 24, 14-ounce bucket jars.
- 12/1-lb Sv/WC -- A case of 12, 1-pound server jars with plain white caps, used as refills for the 12/1-pound table servers.
- 12/1-lb Beehv -- A case of 12, 1-pound ceramic pottery skep beehives.
- 12/1-lb Cof-et -- A case of 12, 1-pound plastic beverage servers called Coffee-ettes.
- 12/1-lb Jug -- A case of 12, 1-pound ceramic pottery jugs.
- 12/1-lb Mammy -- A case of 12, 1-pound ceramic pottery containers made to resemble a Negro mammy.
- 12/1-lb OCrk -- A case of 12, 1-pound ceramic pottery containers in the shape of an orange with green leaves on the top and called Orange Crocks.
- 12/1-lb SHPit -- A case of 12, 1-pound ceramic pottery split-handle pitchers.
- 24/1-lb Modrn -- A case of 24, 1-pound glass modernistic jars. Principal use is for comb honey.
- 24/1-lb Beehv -- A case of 24, 1-pound ceramic pottery skep beehives.
- 24/1-lb BBhv -- A case of 24, 1-pound ceramic pottery bears holding a skep beehive.
- 24/1-lb OBBhv -- A case of 24, 1-pound ceramic pottery skep beehives, decorated with orange blossoms.

24/1-lb Cat -- A case of 24, 1-pound ceramic pottery containers in the shape of a cat.

24/1-lb HB -- A case of 24, 1-pound plastic bears called honey bears.

24/18-oz Pint D -- A case of 24, glass pint decanters with a capacity of 18 ounces of honey.

12/21-oz Flas -- A case of 12, 21-ounce plastic refrigerator jars.

12/2-lb FB -- A case of 12, 2-pound glass, globe-shaped jars called fishbowls.

12/2-1/2-lb Tin -- A case of 12, 2-1/2-pound round tin cans with lids, referred to as tins.

24/2-1/2-lb MITin -- A case of 24, 2-1/2-pound tins (see above) with lids soldered for mailing.

12/3-lb STin -- A case of 12, 3-pound canning tins sealed by machine, referred to as sealed tins.

12/3-lb Bbl -- A case of 12, 3-pound ceramic barrel-shaped containers.

12/3-lb Jug -- A case of 12, 3-pound pottery jugs.

6/4-1/4-lb RJ -- A case of six, 4-1/4-pound round, glass economy jars.

12/4-1/2-lb LMITin -- A case of 12, 4-1/2-pound lithographed tins with lids soldered for mailing.

6/5-lb Sq -- A case of six, 5-pound glass, square refrigerator jars.

12/5-lb MITin -- A case of 12, 5-pound tin cans with lids soldered for mailing.

6/7-lb MJ -- A case of six, 7-pound round, two-quart mason jars.

6/9-lb STin -- A case of six, 9-pound canning tins sealed by machine and referred to as sealed tins.

6/10-lb Tin -- A case of six, 10-pound tin cans with lids.

Bulk Sizes

1/12-lb MJ -- One round mason jar holding approximately 12 pounds of honey. Weights vary, depending on density of honey.

1/30-lb Super -- A beehive super holding approximately 30 pounds of comb-honey in frames. Weights vary, depending on density and amount of honey in the comb cells.

APPENDIX 2

DATA COLLECTION FORM

INVOICE AND SHIPPING INFORMATION

Record No. _____

Firm No. _____

Purchaser's Description: Wholesaler ☐ Jobber ☐ Fruit-Packer ☐ Honey-Packer ☐Shipping Point: Firm ☐ _____ then _____Method of Shipping: Firm's Truck ☐ Truckline ☐ Freight ☐ Express ☐ ParcelType of Sale: F.O.B. ☐ Delivered Sale ☐ Consignment ☐ _____ ☐

No. of Cases	Contn'r Size	Type Honey	Container Type	Gr.Wt. per cs lbs	Gr.Wt. of Lot lbs	Net Wt. per cs lbs	Net Wt. of Lot lbs	Del. Price of cs
	24/08	OB	Q FB					\$
	24/16	OB	Q FB					
	12/16	OB	Sv/PWCp					
	12/32	OB	Q					
	06/80	OB	GLJ.Sq.Rf					
	12/80	OB	Tin					
	01/60	OB	Can					
	24/16	OB/Cb	Tb Q FB					
	12/32	OB/Cb	Q					
	12/40	OB/Cb	Sq. Rf.					
	/	OB/Cb						
	/							
	01/99		Drum					
TOTAL								

DATA COLLECTION FORM--continued

--FLORIDA HONEY

Invoice No. _____ Date: / / 56
/ / 55

Retailer ☐ Bakery ☐ Candy Mfr. ☐ Coop. ☐ Chain ☐

☐ Destination of Shipment:

Post Insured ☐ Truck Collect ☐ Express Collect ☐ Picked up ☐

☐

Del.
Value
of Lot

Broker's
Comm'n.
@

Purchaser's
Discount
@

Freight
Deducted

Net Return
to Firm
per LotNet Return
to Firm
per lb.[illegible]

IBM CARD DATA SHEET - PROJECT - 791

Column	Code	Item
1-3		Record Number
4		Firm Number
5		Season
6		Month
7-8		Day of Month
9		Purchaser's Description
10-13		Destination - State and City
14		Method of Shipping
15		Type of Sale
16-18		Broker's Commission Rate
19-22		Purchaser's Discount Rate
23-25		Reserved
26-28		Reserved
29-32		Reserved
33-37		Number of Cases in Lot
38-40		Container Size
41		Type of Honey
42-43		Container Type
44-50		Gross Weight of Lot
51-55		Net Weight of Lot
56-61		Delivered Value of Lot
62-65		Broker's Commission on Lot
66-69		Purchaser's Discount on Lot
70-74		Freight Charges on Lot
75-80		Net Return on Lot

APPENDIX 3

METHOD OF CALCULATING PACKERS' OWN TRUCK COSTS OF DELIVERY

The method used in processing data, obtained from the packers' sales invoices, to evaluate the delivery cost of each lot of honey, was as follows:

1. Each firm was handled as a separate project in order to determine and apply its own specific transportation costs.
2. The invoice data forms were sorted into groups by date of sale since the dates indicated that a delivery trip had been made on a specific day. The exact itinerary was traced out on a map of Florida using the destinations (delivery points) taken from the invoices. It was found, from this first sort by dates, that packers had definite, established sales routes. From the itinerary and the dates it was determined which trips were of short duration and distances from the plants, and which were one-day trips or two-day overnight trips. The cost of each trip was worked up separately in order to allocate costs equitably.
3. Each invoice data form was posted with the distance, in miles, that the delivery point was from the packing plant.
4. The gross weight of each lot of honey was also posted on the invoice data form and the total gross weight summed for all lots if there was more than one lot of honey delivered per invoice.

5. The total gross-pound miles charged to each delivery stop (or invoice) was calculated by multiplying the total gross pounds delivered per stop by the number of miles to that stop (derived in Step 3).
6. The gross-pound miles of all the delivery stops on the trip were summed to obtain the gross-pound miles for the entire trip.
7.
 - a. The cost of short trips was calculated on the basis of labor time for loading the truck, the driver's salary per mile at his usual estimated speed for such trips, the cost of operating the truck per mile and the time spent unloading at each delivery stop.
 - b. The cost of the one-day and two-day trips was calculated on the basis of the driver's salary per day, extras for lodging and storage of truck overnight, and the cost per mile for the truck.
8. The cost of each delivery trip was divided by the total gross-pound miles for the trip, to derive the cost of transporting one gross-pound mile for that specific trip.
9. The cost of one gross-pound mile for a specific trip was multiplied by the gross-pound miles posted (or charged) to each delivery stop (Step 5), to derive the proportionate delivery cost for each stop of a specific trip.
10. If more than one lot of honey was delivered to a stop, each lot was allocated its proportional share, of the total cost of delivery to that stop, on the basis of the gross weight of each lot.

APPENDIX 4

Table 67.--Orange Blossom Comb honey, 1955 and 1956--filtered versus unfiltered--comparison of average f.o.b prices received per pound by 9 packers by type of sale

Type of sale	1955		1956	
	Filtered	Unfiltered	Filtered	Unfiltered
			<u>Consumer sizes</u>	
FOB (pickup) ^a	\$0.276	\$0.278	\$0.280	\$0.269
Delivered packer ^a	.291	.234	.301	.278
broker ^b	.256	----	.283	----
refunds ^c	.321	.267	.333	.278
Consignment ^b	.259	----	.263	----
Custom pack ^a	.221	----	.277	----
Average (consumer sizes)	\$0.270	\$0.235	\$0.287	\$0.274
			<u>Bulk sizes</u>	
FOB (pickup) ^a	\$0.202	----	\$0.235	\$0.190
Average (bulk sizes)	\$0.202	----	\$0.235	\$0.190

^aDirect sales by packer.

^bSales arranged by broker.

^cRefunds are deducted for returned goods.

Table 68.--Orange Blossom honey, 1955 and 1956--filtered versus unfiltered--comparison of average f.o.b. prices received per pound by 9 packers by type of sale

Type of sale	1955		1956	
	Filtered	Unfiltered	Filtered	Unfiltered
<u>Consumer sizes</u>				
FOB (pickup) ^a	\$0.219	\$0.220	\$0.230	\$0.218
Delivered packer ^a	.213	.178	.237	.193
broker ^b	.235	----	.257	----
refunds ^c	.438	.206	.259	.226
Consignment ^b	.209	----	.223	----
Custom pack ^a	.204	----	.160	----
Average (consumer sizes)	\$0.217	\$0.183	\$0.234	\$0.198
<u>Bulk sizes</u>				
FOB (pickup) ^a	\$0.141	\$0.138	\$0.192	\$0.147
Delivered packer ^a	.162	.126	.189	.123
broker ^b	.160	----	.189	----
Consignment ^b	.140	----	----	----
Custom pack ^a	----	.139	.140	----
Average (bulk sizes)	\$0.145	\$0.135	\$0.190	\$0.146

^aDirect sales by packer.

^bSales arranged by broker.

^cRefunds are deducted for returned goods.

Table 69.--Light Amber honey, 1955 and 1956--filtered versus unfiltered--comparison of average f.o.b. prices received per pound by 9 packers by type of sale

Type of sale	1955		1956	
	Filtered	Unfiltered	Filtered	Unfiltered
<u>Consumer sizes</u>				
FOB (pickup) ^a	\$0.209	\$0.207	\$0.224	\$0.224
Delivered packer ^a	.156	.184	.165	.203
broker ^b	.178	----	.189	----
refunds ^c	.216	----	----	----
Consignment ^b	.214	----	.222	----
Custom pack ^a	----	----	.123	----
Average (consumer sizes)	\$0.179	\$0.190	\$0.193	\$0.209
<u>Bulk sizes</u>				
FOB (pickup) ^a	\$0.125	\$0.126	\$0.143	\$0.139
Delivered packer ^a	.147	.106	.135	.131
broker ^b	.123	----	.145	----
Average (bulk sizes)	\$0.127	\$0.125	\$0.143	\$0.139

^aDirect sales by packer.

^bSales arranged by broker.

^cRefunds are deducted for returned goods.

Table 70.--Amber honey, 1955 and 1956--filtered versus unfiltered--
comparison of average f.o.b. prices received per pound
by 9 packers by type of sale

Type of sale	1955		1956	
	Filtered	Unfiltered	Filtered	Unfiltered
	<u>Consumer sizes</u>			
FOB (pickup) ^a	\$0.162	\$0.149	\$0.155	\$0.161
Delivered packer ^a	.157	.141	.162	.157
refunds ^c	.148	----	----	----
Average (consumer sizes)	\$0.142	\$0.142	\$0.156	\$0.157
	<u>Bulk sizes</u>			
FOB (pickup) ^a	\$0.121	\$0.106	\$0.127	\$0.121
Delivered packer ^a	.134	.111	----	.122
broker ^b	----	----	.177	----
Average (bulk sizes)	\$0.110	\$0.110	\$0.130	\$0.122

^aDirect sales by packer.

^bSales arranged by broker.

^cRefunds are deducted for returned goods.

Table 71.--All honey, 1955--per cent of total volume sold by rate of discount and type of buyer, 9 packers

Per cent discount	Buyers					Candy makers	Others
	Whole-salers	Chains	Co-ops	Gift stands	Inde-pendents	Honey packers	Bakers
None	1.3	0.3	a	6.1	0.7	0.4	a
1.0	6.6	15.2	0.1	1.0	3.7	---	a
1.0* to 1.5	1.2	.1	---	---	---	---	---
2.0 to 2.0*	1.3	2.4	---	1.4	1.5	.1	---
3.0 to 4.0	.1	---	---	a	---	---	---
5.0	.4	---	---	a	a	---	---
5.0 and 1.0 to 8.5	.1	---	---	a	.1	---	---
10.0	---	---	---	1.1	a	---	---
10.0 and 1.0 to 10.0 and 2.0	.2	.1	---	a	a	---	---
15.0 and 1.0 to 15.0 and 2.0	.6	.8	---	.1	.1	---	a
20.0 to 20.0 and 1.0	.4	2.2	.5	a	---	---	---
Other	.3	---	---	.1	a	---	---
Total	12.5	21.1	0.6	9.8	6.1	0.5	a
Bulk sizes							
None	11.2	a	---	0.4	0.1	19.9	6.0
1.0 to 1.0*	.3	---	---	---	a	.6	.6
2.0 to 5.0 and 1.0	2.7	---	---	---	---	---	---
Other	---	---	---	---	---	.1	---
Total	14.2	a	---	0.4	0.1	20.6	6.6
All sizes	26.7	21.1	0.6	10.2	6.2	21.1	6.6
							7.5

* Count was taken after freight charges were deducted from delivered price.

a Less than 0.05 per cent.

Table 72.--All honey, 1955--average f.o.b. prices received per pound by
9 packers, by brokers' commission rates and type of buyer

Per cent commission	Whole- sellers	Chains	Co-ops	Gift stands	Buyers			
					Inde- pendents	Honey packers	Bakers	Candy makers
					Consumer sizes			
	\$0.197	\$0.202	\$0.195	\$0.226	\$0.192	\$0.246	---	---
^a	.271	---	---	---	---	---	---	\$0.240
3.0	.207	---	---	---	---	---	---	---
4.0	.239	.232	---	---	---	---	---	---
4.5	.219	.274	---	---	.240	---	---	---
5.0	.229	.237	.272	---	.243	---	.170	---
6.0	---	.228	---	---	.213	---	---	---
10.0	---	---	---	---	.259	---	---	---
20.0	.249	---	---	---	.221	---	---	---
Average	\$0.213	\$0.207	\$0.202	\$0.226	\$0.194	\$0.246	\$0.170	\$0.240
					Bulk sizes			
	\$0.131	\$0.122	---	\$0.122	\$0.161	\$0.122	\$0.118	\$0.126
^a	.147	---	---	---	---	.148	.144	.153
5.0								
Average	\$0.131	\$0.122	---	\$0.121	\$0.161	\$0.123	\$0.121	\$0.126

^aFirms' direct sales (no commission).

Table 73.--All honey, 1956--average f.o.b. prices received per pound by
9 packers, relative to brokers' commission rates and type
of buyer

Per cent commission	Whole- sellers	Buyers							
		Chains	Co-ops	Gift stands	Inde- pendents	Honey packers	Bakers	Candy makers	Others
					<u>Consumer sizes</u>				
a	\$0.209	\$0.210	\$0.207	\$0.242	\$0.194	\$0.238	\$0.120	----	\$0.215
3.0	.162	----	----	----	----	----	----	----	----
5.0	.233	.301	.311	----	.278	----	----	----	----
6.0	.245	.250	----	.252	.203	----	----	----	----
10.0	.273	----	----	----	.239	----	----	----	----
Average	\$0.220	\$0.214	\$0.209	\$0.242	\$0.198	\$0.238	\$0.120	----	\$0.215
					<u>Bulk sizes</u>				
a	\$0.140	----	----	\$0.135	\$0.199	\$0.133	\$0.135	\$0.144	\$0.135
3.0	----	----	----	----	----	----	.141	----	----
5.0	.172	----	----	----	----	.174	.177	----	.173
6.0	----	----	----	----	----	----	----	----	.160
Average	\$0.140	----	----	\$0.135	\$0.199	\$0.134	\$0.137	\$0.144	\$0.136

^aFirms' direct sales (no commission).

Table 74.--Orange Blossom Comb honey, 1955 and 1956--filtered versus unfiltered--comparison of average f.o.b. prices per pound received by 9 packers relative to brokers' commission and direct sales by firms

Per cent commission	1955		1956	
	Filtered	Unfiltered	Filtered	Unfiltered
<u>Consumer sizes</u>				
Firms' sales				
(no commission)	\$0.282	\$0.235	\$0.289	\$0.274
3.0	.271	----	----	----
4.0	.307	----	----	----
4.5	.244	----	----	----
5.0	.257	----	.281	----
6.0	.257	----	.285	----
10.0	.280	----	.271	----
20.0	.249	----	----	----
Average--				
brokers' sales	\$0.256	----	\$0.283	----
<u>Bulk sizes</u>				
Firms' sales				
(no commission)	\$0.202	----	\$0.235	\$0.190

Table 75.--Light Amber honey, 1955 and 1956--filtered versus unfiltered--comparison of average f.o.b. prices per pound received by 9 packers relative to brokers' commission and direct sales by firms

Per cent commission	1955		1956	
	Filtered	Unfiltered	Filtered	Unfiltered
<u>Consumer sizes</u>				
Firms' sales				
(no commission)	\$0.177	\$0.190	\$0.189	\$0.209
3.0	----	----	.162	----
5.0	.179	----	.211	----
6.0	.204	----	.216	----
Average-- brokers' sales	\$0.185	----	\$0.246	----
<u>Bulk sizes</u>				
Firms' sales				
(no commission)	\$0.124	\$0.125	\$0.135	\$0.139
3.0	----	----	.141	----
5.0	.148	----	.174	----
6.0	----	----	.160	----
Average-- brokers' sales	\$0.148	----	\$0.146	----

Table 76.--All honey, 1955, average f.o.b. price, average cost of packing and average net returns received by 9 packers per pound, listed by type and pack size--filtered versus unfiltered

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
Consumer sizes						
OB						
12/3-oz Cr Bkt	\$.923	\$.458	\$.367	\$1.330	\$0.950	\$0.380
12/3-oz Crate						
48/3-oz Bbl	.459	.352	.107			
28/3-oz EE	.402	.373	.029	.531	.471	.060
12/8-oz Jug	1.193	.994	.199			
12/8-oz PTPit	.505	.522	-.017			
12/8-oz CPot	.250	.325	-.075			
12/8-oz S&P	.534	.408	.126			
12/8-oz SvSt	.833	.411	.472			
24/8-oz Q	.260	.145	.115	.259	.166	.093
24/8-oz FB	.294	.184	.110	.264	.197	.067
24/8-oz Sv	.526	.363	.163			
12/10-oz OBPlt	1.954	1.859	-.205			
24/14-oz OJ	.212	.141	.071			
12/1-lb Sv	.326	.217	.109	.326	.415	-.089
12/1-lb Sv/MC	.205	.096	.109			
12/1-lb Beehv	1.040	.901	.139			
12/1-lb Cof-et						
12/1-lb Jammy	.180	.020	.160	1.052	1.014	.038
12/1-lb OCrk	.588	.484	.104			
12/1-lb SHPlt	1.158	.928	.230			

Table 76.--Continued

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
<u>OB</u>						
24/1-lb Q	\$0.219	\$0.090	\$0.129	\$0.213	\$0.095	\$0.118
24/1-lb FB	.229	.130	.099	.224	.101	.123
24/1-lb Beehv	.990	.716	.274	---	---	---
24/1-lb OBHv	.656	.449	.207	---	---	---
24/1-lb HB	---	---	---	---	---	---
12/2-lb Q	.213	.073	.140	.973	.738	.235
12/2-lb FB	.209	.073	.136	.188	.078	.110
12/2 1/2-lb Sq	.196	.084	.112	---	---	.114
12/2 1/2-lb Tin	---	---	---	.181	.067	.118
24/2 1/2-lb Tin	.210	---	---	.170	.052	---
24/2 1/2-lb MTin	.340	.178	.162	---	---	---
12/3-lb Jug	.572	.401	.171	---	---	---
8/4 1/4-lb RJ	.185	.037	.148	---	---	.116
6/5-lb RJ	.182	.034	.148	.165	.049	.118
6/5-lb Sq	.219	.060	.159	.176	.058	.075
6/5-lb Tin	---	---	---	.142	.067	.110
12/5-lb Tin	.172	.050	.122	.168	.058	.157
12/5-lb MTin	.243	.078	.165	.165	.108	.121
6/10-lb Tin	---	---	---	.161	.040	---
<u>Bulk sizes</u>						
1/12-lb MJ	\$0.140	\$0.025	\$0.115	\$0.140	\$0.017	\$0.123
1/60-lb Can	.173	.019	.154	.149	.030	.119
1/650-lb Drum	.140	.004	.136	.125	.005	.120

Table 76.--Continued

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
<u>Consumer sizes</u>						
LA						
24/8-oz Q	\$0.238	\$0.145	\$0.093	\$0.253	\$0.166	\$0.087
12/1-lb Sv	.305	.217	.088	----	----	----
12/1-lb Sv/WC	.205	.096	.109	----	----	----
24/1-lb Q	.196	.090	.106	.192	.095	.097
24/1-lb FB	----	----	----	.181	.101	.080
12/2-lb Q	.177	.073	.104	.187	.078	.109
12/2 1/2-lb Sq	.184	.084	.100	.180	.067	.113
6/4 1/4-lb RJ	.170	.037	.133	----	----	----
6/5-lb RJ	.160	.034	.126	----	----	----
6/5-lb Sq	----	----	----	----	----	----
6/5-lb Tin	----	----	----	.115	.058	.057
12/5-lb Tin	.144	.047	.097	.143	.067	.076
				.168	.058	.110
<u>Bulk sizes</u>						
1/12-lb MJ	\$ ----	\$ ----	\$ ----	\$0.124	\$0.058	\$0.066
1/60-lb Can	.149	.019	.130	.121	.030	.081
1/650-lb Drum	.124	.004	.120	.125	.005	.120
<u>Consumer sizes</u>						
12/4 1/2-lb Tin	\$0.162	\$0.039	\$0.123	\$ ----	\$ ----	\$ ----
12/4 1/2-lb M Tin	.113	.072	.041	----	----	----
6/5-lb Tin	----	----	----	.142	.067	.075

Table 76.--Continued

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
^A 12/5-lb Tin	\$0.146	\$0.047	\$0.099	\$0.148	\$0.058	\$0.090
1/60-lb Can	\$0.121	\$0.019	\$0.102	\$0.114	\$0.030	\$0.084
1/650-lb Drum	.122	.004	.118	.105	.005	.100
	<u>Bulk sizes</u>					
	<u>Bulk size only</u>					
^{DA} 1/650-lb Drum	\$ ----	\$ ----	\$ ----	\$0.080	\$0.005	\$0.085
	<u>Consumer sizes</u>					
^{TU} 48/3-oz EE	\$0.705	\$0.373	\$0.332	\$ ----	\$ ----	\$ ----
24/8-oz FB	.353	.184	.169	----	----	----
12/1-lb Sv/WC	.277	.096	.181	----	----	----
24/1-lb Q	.262	.090	.172	.279	.095	.184
24/1-lb FB	.312	.130	.182	----	----	----
12/2-lb Q	.237	.073	.164	.266	.078	.188
24/2 1/2-lb Tin	.298	.067	.231	----	----	----
6/5-lb RJ	.216	.034	.182	----	----	----
6/5-lb Sq	----	----	----	.202	.058	.144

Table 76.--Continued

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
<u>TU</u>						
6/5-lb Tin	\$.269	\$.047	\$.222	\$.251	\$.067	\$.184
12/5-lb Tin	.298	.078	.220	.236	.058	.178
12/5-lb M Tin	.329	.022	.307	---	---	---
6/7-lb MJ						
<u>Bulk sizes</u>						
<u>TU</u>						
1/60-lb Can	\$.205	\$.019	\$.186	\$.---	\$.---	\$.---
1/650-lb Drum	.165	.004	.161	---	---	---
<u>Consumer sizes</u>						
<u>OBC</u>						
24/8-oz Q	\$.359	\$.176	\$.183	\$.391	\$.267	\$.104
24/8-oz FB	.289	.134	.155	.380	.283	.047
24/14-oz OJ	.270	.114	.156	.246	.111	.135
24/1-lb Q	.276	.123	.153	.259	.143	.116
24/1-lb FB	.274	.134	.140	.269	.326	.057
24/1-lb Tumb	.251	.093	.158	.288	.282	.006
12/2-lb Q	.315	.159	.156	---	---	---
12/2-lb FB	.260	.097	.163	.225	.143	.082
12/2-1/2-lb Sq	.236	.081	.155	.237	.081	.156
6/5-lb Sq	.189	.093	.096	---	---	---
12/5-lb Tin	.311	.104	.207	---	---	---
12/5-lb M Tin	.420	.221	.199	---	---	---
12/21-oz Plas						

Table 76.--Continued

Honey type and pack size	Filtered			Unfiltered		
	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb	Average f.o.b. price received per lb	Average cost of packing per lb	Average net return per lb
<u>Bulk sizes</u>						
<u>OBC</u>						
1/30-lb Super	\$0.202	\$0.001	\$0.201	\$ ----	\$ ----	\$ ----
<u>Consumer size only</u>						
<u>LAC</u>						
24/1-lb Tumb	\$0.259	\$0.134	\$0.125	\$ ----	\$ ----	\$ ----
24/1-lb Modrn	----	----	----	.275	.120	.155
12/2 1/2-lb Sq	----	----	----	.230	.143	.087
<u>Consumer size only</u>						
<u>OB&BLo</u>						
24/8-oz Q	\$ ----	\$ ----	\$ ----	\$0.477	\$0.406	\$0.071
24/8-oz FB	.532	.331	.201	----	----	----
<u>Consumer size only</u>						
<u>OBSp</u>						
24/1-lb FB	\$0.323	\$0.123	\$0.200	\$ ----	\$ ----	\$ ----
<u>Bulk size only</u>						
<u>Clv</u>						
1/650-lb Drum	\$ ----	\$ ----	\$ ----	\$0.120	\$0.005	\$0.115

Table 77.--All honey, 1955--percentage of total volumes of consumer-size packs sold to principal market outlets by 9 packers

Type of pack	Percentage to outlets (buyers)						
	Whole-salers	Chains	Cooperatives	Gift stands	Independents	Honey packers	Others
12/3-oz GrBkt	---	---	---	a	---	---	---
12/3-oz Crate	---	---	---	a	---	---	---
48/3-oz Bbl	---	---	---	a	---	a	---
48/3-oz EE	a	a	---	0.1	---	---	a
12/4-oz CPot	---	---	---	---	---	---	---
12/8-oz Jug	---	---	---	a	---	---	---
12/8-oz PTPit	a	---	---	a	---	---	a
12/8-oz Plas	---	---	---	---	---	---	---
12/8-oz CPot	a	---	---	---	---	---	---
12/8-oz S&P	---	---	---	a	---	---	---
12/8-oz SvSt	a	---	---	.1	a	---	---
24/8-oz Q	0.6	2.8	0.2	.2	0.3	---	a
24/8-oz FB	.3	a	---	.8	.1	a	a
24/8-oz Sv	a	---	---	.5	---	---	---
12/10-oz OBPlt	---	---	---	a	---	---	---
24/14-oz OJ	.1	.6	---	a	---	0.2	---
12/1-lb Sv	1.0	1.2	a	.4	.3	---	---
12/1-lb Sv/MC	.5	.1	---	---	.1	---	---
12/1-lb Beehv	---	---	---	a	---	---	---
12/1-lb Cof-et	---	---	---	a	---	---	---
12/1-lb Jug	---	---	---	---	---	---	---
12/1-lb Mammy	a	---	---	---	---	---	---
12/1-lb OCrk	---	---	---	a	---	---	---
12/1-lb SHPlt	---	---	---	.1	---	---	a
24/1-lb Q	5.2	13.7	.4	.6	1.5	a	a
24/1-lb FB	2.1	.6	---	2.7	.2	.1	---
24/1-lb Beehv	---	---	---	a	---	---	---
24/1-lb BBHv	---	---	---	---	---	---	---
24/1-lb OBHv	---	---	---	---	a	---	---

Table 77.--Continued

Type of pack	Percentage to outlets (buyers)						
	Whole- salers	Chains	Cooper- atives	Gift stands	Inde- pendents	Honey packers	Others
24/1-lb Cat	---	---	---	---	---	---	---
24/1-lb HB	---	---	---	a	---	---	---
24/1-lb Modrn	a	a	---	a	a	---	a
24/1-lb Tumb	2.0	3.6	0.1	a	0.1	0.1	---
12/21-oz Plas	---	---	---	0.1	---	---	---
12/2-lb Q	3.3	2.5	0.2	.8	1.1	.1	a
12/2-lb FB	---	---	---	.3	---	---	---
12/2 1/2-lb Sq	1.1	.5	a	1.1	.3	.3	a
12/2 1/2-lb Tin	---	---	---	a	---	---	---
24/2 1/2-lb Tin	a	---	---	2.1	a	---	a
24/2 1/2-lb M Tin	---	---	---	---	---	---	---
12/3-lb STin	---	---	---	---	---	---	---
12/3-lb Jug	---	---	---	---	a	---	---
6/4 1/4-lb RJ	.1	1.3	---	---	.1	---	---
12/4 1/2-lb LM Tin	---	---	---	---	---	---	a
12/4 1/2-lb ITin	.3	4.2	---	a	a	---	---
6/5-lb RJ	3.6	2.8	a	.2	.3	a	a
6/5-lb Sq	a	.1	---	.3	.1	---	a
6/5-lb Tin	1.2	3.9	.4	a	.1	---	---
12/5-lb Tin	3.0	3.4	---	8.8	7.1	.2	0.1
12/5-lb M Tin	---	---	---	a	---	---	a
6/7-lb MJ	---	---	---	---	---	---	---
6/9-lb STin	---	---	---	a	---	---	---
6/10-lb Tin	---	---	---	---	---	---	---
Total	24.5	41.5	1.3	19.4	11.9	1.1	0.1
							0.2

a Less than 0.05 per cent.

Table 78.--All honey, 1956--volumes of consumer-size packs sold to principal market outlets by 9 packers

Type of pack	Pounds to outlets (buyers)						
	Whole-salers	Chains	Cooperatives	Gift stands	Independents	Honey packers	Others
12/3-oz CrBkt	---	---	---	---	---	---	---
12/3-oz Grate	---	---	---	7	---	---	---
48/3-oz Bbl	---	---	---	746	---	---	---
48/3-oz EE	9	---	---	1,079	144	---	---
12/4-oz CPot	665	---	---	---	---	---	---
12/8-oz Jug	---	---	---	490	---	---	---
12/8-oz PPit	---	---	---	93	3	---	---
12/8-oz Plas	---	---	---	18	---	---	---
12/8-oz CPot	1,327	---	---	---	216	---	---
12/8-oz S&P	---	---	---	83	---	---	---
12/8-oz SvSt	---	---	---	605	---	---	---
24/8-oz Q	9,948	36,100	2,496	2,865	2,658	---	372
24/8-oz FB	4,008	36	---	9,682	156	---	---
24/8-oz Sv	6	---	---	9,576	---	---	---
12/10-oz OBPit	---	---	---	---	---	---	---
24/14-oz OJ	---	---	---	235	---	---	---
12/1-lb Sv	7,440	13,660	360	3,521	2,436	---	8
12/1-lb Sv/WC	120	---	---	---	60	---	---
12/1-lb Beehv	---	---	---	---	---	---	---
12/1-lb Cof-et	---	---	---	---	---	---	---
12/1-lb Jug	---	---	---	84	---	---	---
12/1-lb Mammy	---	---	---	---	---	---	---
12/1-lb OCrk	---	---	---	372	---	---	---
12/1-lb SHPit	---	---	---	198	30	---	---
24/1-lb Q	57,240	171,492	8,508	10,056	10,458	---	363
24/1-lb FB	22,332	192	---	42,565	672	3,348	48
24/1-lb Beehv	---	---	---	12	---	---	---
24/1-lb BBHv	---	---	---	1	---	---	---
24/1-lb OBBHv	---	---	---	4,224	---	---	---

Table 78.--Continued

Type of pack	Pounds to outlets (buyers)						
	Whole-salers	Chains	Cooperatives	Gift stands	Independents	Honey packers	Others
24/1-lb Cat	---	---	---	24	---	---	---
24/1-lb HB	---	---	---	---	---	---	---
24/1-lb Modrn	72	240	---	312	24	---	24
24/1-lb Tumb	10,848	37,272	552	1,053	1,608	3,672	20
12/21-oz Plas	---	---	---	165	---	---	---
12/2-lb Q	27,768	36,696	4,704	10,314	10,104	360	224
12/2-lb FB	---	---	---	8,136	---	---	---
12/2 1/2-lb Sq	6,615	1,478	---	17,635	930	1,950	31
12/2 1/2-lb Tin	---	---	---	263	---	---	---
24/2 1/2-lb Tin	---	---	---	28,564	---	---	225
24/2 1/2-lb MTin	---	---	---	---	---	---	---
12/3-lb STin	---	---	---	3,531	---	---	---
12/3-lb Jug	---	---	---	---	---	---	---
6/4 1/4-lb RJ	7,977	10,481	---	---	---	---	---
12/4 1/2-lb IMTin	---	---	---	---	---	---	---
12/4 1/2-lb LTin	---	32,940	---	---	108	---	---
6/5-lb RJ	32,430	66,300	960	2,365	2,010	---	1,340
6/5-lb Sq	720	780	---	4,035	---	---	75
6/5-lb Tin	18,940	53,940	6,750	575	2,640	---	60
12/5-lb Tin	41,495	68,500	---	110,470	71,855	360	1,645
12/5-lb MTin	---	---	---	915	---	---	305
6/7-lb MJ	---	---	---	---	---	---	---
6/9-lb STin	---	---	---	4,248	---	---	---
6/10-lb Tin	---	---	---	100	---	---	---
Total	249,960	532,307	24,330	279,217	106,112	9,690	7,988 4,740

Table 79.--All honey, 1956--percentage of total volumes of consumer-size packs sold to principal market outlets by 9 packers

Type of pack	Percentage to outlets (buyers)						
	Whole-salers	Chains	Cooperatives	Gift stands	Independents	Honey packers	Others
12/3-oz CrBkt	---	---	---	---	---	---	---
12/3-oz Grate	---	---	---	a	---	---	---
48/3-oz Bbl	---	---	---	0.1	---	---	---
28/3-oz EE	a	---	---	.1	a	---	---
12/4-oz CPot	0.1	---	---	---	---	---	---
12/8-oz Jug	---	---	---	a	---	---	---
12/8-oz PTPit	---	---	---	a	a	---	---
12/8-oz Flas	---	---	---	a	---	---	---
12/8-oz CPot	.1	---	---	---	a	---	---
12/8-oz S&P	---	---	---	a	---	---	---
12/8-oz SvSt	---	---	---	---	---	---	---
24/8-oz Q	.8	---	0.2	.2	0.2	---	a
24/8-oz FB	.3	3.1	---	.8	a	---	---
24/8-oz Sv	a	a	---	.8	---	---	---
12/10-oz OBPlt	---	---	---	---	---	---	---
24/14-oz OJ	---	---	---	a	---	---	---
12/1-lb Sv	0.6	1.2	a	.3	.2	---	a
12/1-lb Sv/WC	a	---	---	---	a	---	---
12/1-lb Beehv	---	---	---	---	---	---	---
12/1-lb Cof-et	---	---	---	---	---	---	---
12/1-lb Jug	---	---	---	a	---	---	---
12/1-lb Mammy	---	---	---	---	---	---	---
12/1-lb OGrk	---	---	---	a	---	---	---
12/1-lb SHPlt	---	---	---	a	a	---	---
24/1-lb Q	4.7	14.1	0.7	.8	.9	---	a
24/1-lb FB	1.8	a	---	3.5	.1	0.3	a
24/1-lb Beehv	---	---	---	---	---	---	---
24/1-lb BBHV	---	---	---	a	---	---	---
24/1-lb OBHV	---	---	---	.3	---	---	---

Table 79.---Continued

Type of pack	Percentage to outlets (buyers)						
	Whole-salers	Chains	Cooperatives	Gift stands	Independents	Honey packers	Others
24/1-lb Cat	---	---	---	a	---	---	---
24/1-lb HB	---	---	---	---	---	---	---
24/1-lb Modrn	a	a	---	a	a	---	a
24/1-lb Tumb	0.9	3.1	a	0.1	0.1	0.3	a
12/21-oz Plas	---	---	---	a	---	---	---
12/2-lb Q	2.3	3.0	0.4	.9	.8	a	a
12/2-lb FB	---	---	---	.7	---	---	---
12/2 1/2-lb Sq	.6	.1	---	1.5	.1	.2	a
12/2 1/2-lb Tin	---	---	---	a	---	---	---
24/2 1/2-lb Tin	---	---	---	2.4	---	---	a
24/2 1/2-lb M Tin	---	---	---	---	---	---	---
12/3-lb STin	---	---	---	.3	---	---	---
12/3-lb Jug	---	---	---	---	---	---	---
6/4 1/4-lb RJ	.7	.9	---	---	---	---	---
12/4 1/2-lb LM Tin	---	---	---	---	---	---	---
12/4 1/2-lb LTin	---	2.7	---	---	a	---	---
6/5-lb RJ	2.7	5.5	.1	.2	.2	---	0.1
6/5-lb Sq	.1	.1	---	.3	---	---	a
6/5-lb Tin	1.6	4.4	.6	---	.2	---	a
12/5-lb Tin	3.4	5.6	---	9.1	5.9	a	.1
12/5-lb M Tin	---	---	---	.1	---	---	a
6/7-lb MJ	---	---	---	---	---	---	---
6/9-lb STin	---	---	---	.3	---	---	---
6/10-lb Tin	---	---	---	a	---	---	---
Total	20.6	43.8	2.0	23.0	8.7	0.8	0.7
							0.4

a Less than 0.05 per cent.

Table 80.--All bulk honey, 1956--volumes and percentages of bulk-size packs sold to principal market outlets by 9 packers

Type of pack	Pounds to outlets (buyers)						
	Whole-salers	Gift stands	Honey packers	Independents	Bakers	Candy makers	Chains Others
1/12-lb RJ	-----	37	-----	--- 25	-----	-----	-----
1/30-lb Super	-----	-----	11,568	-----	-----	-----	-----
1/60-lb Can	332,580	1,560	14,940	1,200	29,700	960	1,680
1/650-lb Drum	179,380	2,366	373,734	-----	183,772	-----	17,008
Total	511,960	3,963	400,242	1,225	213,472	960	18,688

	Percentage to outlets (buyers)						
		a					
1/12-lb RJ	----	---	---	---	---	---	---
1/30-lb Super	----	---	1.0	---	---	---	---
1/60-lb Can	28.9	0.1	1.3	0.1	2.6	0.1	0.1
1/650-lb Drum	15.6	0.2	32.5	---	16.0	---	1.5
Total	44.5	0.3	34.8	0.1	18.6	0.1	1.6

^a Less than 0.05 per cent.

Table 81.--Orange Blossom honey, 1956--comparison of average net return per pound, filtered versus unfiltered, for various consumer-size packs sold to principal market outlets by 9 packers

Type of pack	Outlets (buyers)											
	Whole-salers		Chains		Cooperatives		Gift stands		Independents		Others	
	Fl.	Unfil.	Fl.	Unfil.	Fl.	Unfil.	Fl.	Unfil.	Fl.	Unfil.	Fl.	Unfil.
12/3-oz CrBkt	---	---	---	---	---	---	---	---	---	---	---	---
12/3-oz Crate	---	---	---	---	---	---	\$0.684	---	---	---	---	---
48/3-oz Bbl	---	---	---	---	---	---	.149	---	---	---	---	---
48/3-oz EE	\$0.215	---	---	---	---	---	.118	\$-0.123	\$0.215	\$-0.205	---	---
12/4-oz CPot	.141*	---	---	---	---	---	---	---	---	---	---	---
12/8-oz Jug	---	---	---	---	---	---	.300	---	---	---	---	---
12/8-oz PTPit	---	---	---	---	---	---	.063	---	.136	---	---	---
12/8-oz Flas	---	---	---	---	---	---	---	---	---	---	---	---
12/8-oz CPot	---	---	---	---	---	---	---	---	---	---	---	---
12/8-oz S&P	---	---	---	---	---	---	.162	---	---	---	---	---
12/8-oz SvSt	---	---	---	---	---	---	.479	---	---	---	---	---
24/8-oz Q	.116	\$0.088	\$0.115	\$0.105	\$0.118	\$0.099	.135	.104	.117	.088	---	---
24/8-oz FB	.086	---	---	.063	---	---	.126	.062	.124	---	---	---
24/8-oz Sv	.214	---	---	---	---	---	.159	---	---	---	---	---
12/10-oz OB Pit	---	---	---	---	---	---	---	---	---	---	---	---
24/14-oz OJ	---	---	---	---	---	---	.104	---	---	---	---	---
12/1-lb Sv	.120	-.005	.118	---	.125	---	.136	-.008	.125	-.031	\$0.154	---
12/1-lb Sv/WC	---	---	---	---	---	---	---	---	.125	---	---	---
12/1-lb Beehv	---	---	---	---	---	---	---	---	---	---	---	---
12/1-lb Cof-et	---	---	---	---	---	---	---	---	---	---	---	---
12/1-lb Jug	---	---	---	---	---	---	-.058	---	---	---	---	---
12/1-lb OCrk	---	---	---	---	---	---	.152	---	---	---	---	---
12/1-lb Mammy	---	---	---	---	---	---	---	---	---	---	---	---
12/1-lb SHPit	---	---	---	---	---	---	.204	---	.201	---	---	---
24/1-lb Q	.133	.126	.138	.121	.142	.118	.148	.129	.161	.124	.125	\$0.179
24/1-lb FB	.091	---	---	.102	---	---	.119	.114	.121	.113	.132	---

Table 81.--Continued

Type of pack	Outlets (buyers)					
	Whole-salers Fil. Unfil.	Chains Fil. Unfil.	Cooper- atives Fil. Unfil.	Gift stands Fil. Unfil.	Inde- pendents Fil. Unfil.	Others Fil. Unfil.
24/1-lb Beehv	---	---	---	\$0.104	---	---
24/1-lb BBHV	---	---	---	\$0.354	---	---
24/1-lb OBHV	---	---	---	.046	---	---
24/1-lb Cat	---	---	---	.174	---	---
24/1-lb HB	---	---	---	---	---	---
24/1-lb Modrn	---	---	---	---	---	---
24/1-lb Tumb	---	---	---	---	---	---
12/21-oz Plas	---	---	---	---	---	---
12/2-lb Q	\$0.136	\$0.148	\$0.153	\$0.135	\$0.148	\$0.129
12/2-lb FB	---	---	---	---	---	---
12/2 1/2-lb Sq	.074	.127	---	.121	---	---
12/2 1/2-lb Tin	---	---	---	---	.125	\$0.179
24/2 1/2-lb Tin	---	---	---	---	.145	---
24/2 1/2-lb M Tin	---	---	---	---	.114	---
12/3-lb S Tin	---	---	---	---	.155	.262
12/3-lb Jug	---	---	---	---	.115	---
6/4 1/4-lb RJ	.088	.157	---	---	---	---
6/5-lb RJ	.153	.162	---	---	---	---
6/5-lb Sq	.139	.132	.165	.180	.133	.130
6/5-lb Tin	---	---	---	.147	.114	.153
12/5-lb Tin	.114	.146	---	---	---	---
12/5-lb M Tin	---	---	---	.136	.128	.108
6/7-lb MJ	---	---	---	.129	.100	.134
6/9-lb S Tin	---	---	---	---	---	.170
6/10-lb Tin	---	---	---	.105	---	.171
	---	---	---	---	---	---
	---	---	---	.141	---	---

*Custom packed, buyer furnished materials.

Table 82.--All honey, 1956--volumes sold, f.o.b. returns, and average f.o.b. prices received by 9 packers in various market areas (listed cities had volumes of 1000 pounds and over)

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns	Average f.o.b. price per lb
<u>Alabama</u>					
Andalusia	1,380	.1	153	\$ 318	\$0.230
Birmingham	5,700	.2	168	1,519	.267
Mobile	1,500	.1	167	431	.288
Montgomery	2,640	.1	660	766	.290
Others	1,896	.1	95	481	.254
Total	13,116	.6	173	\$ 3,515	\$0.268
<u>Connecticut</u>					
Others	60	.0 ^a	60	\$ 12	\$0.200
Total	60	.0 ^a	60	\$ 12	\$0.200
<u>Delaware</u>					
Others	480	.0 ^a	160	\$ 133	\$0.276
Total	480	.0 ^a	160	\$ 133	\$0.276
<u>Florida</u>					
Avon Park	14,123	.6	181	\$ 2,243	\$0.159
Bayard	29,377	1.2	2,938	7,845	.267
Belleview	1,572	.1	44	395	.251
Bonaventure	1,667	.1	79	375	.225
Chiefland	1,448	.1	54	391	.270
Clermont	12,913	.5	41	2,598	.201
Clewiston	1,187	.1	49	271	.228
Cocoa	28,579	1.2	64	7,311	.256
Daytona, Daytona Bch.	20,865	.9	98	3,140	.150
Deland	13,582	.6	34	2,678	.197
Eau Gallie	3,048	.1	3,048	445	.146
Edgewater	27,142	1.1	3,393	3,805	.140
Clearwater	2,099	.1	64	439	.209

Table 82.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns	Average f.o.b. price per lb
Estero	2,704	.1	93	\$ 587	\$0.217
Eustis	1,728	.1	288	504	.292
Pt. Myers	3,935	.2	131	837	.213
Haines City	4,868	.2	31	1,347	.277
Indian River City	3,179	.1	24	725	.228
Indian Rocks Bch.	2,208	.1	116	661	.299
Jacksonville	140,147	5.9	779	30,700	.219
Jennings	1,050	.0 ^a	105	293	.279
Kissimmee	5,100	.2	222	1,135	.223
Lakeland	93,951	4.0	839	21,648	.230
Lake Placid	1,056	.0 ^a	62	205	.194
Lake Wales	1,716	.1	61	411	.240
Leesburg	22,491	.9	36	4,625	.206
Miami	354,766	15.0	819	59,270	.167
Mims	1,389	.1	26	293	.211
Minneola	27,475	1.2	58	5,431	.198
Moore Haven	2,816	.1	282	444	.158
Mt. Dora	2,718	.1	272	717	.264
New Smyrna Beach	2,235	.1	86	401	.179
Ocala	23,034	1.0	28	5,406	.235
Orlando	12,014	.5	123	2,223	.185
Pensacola	4,756	.2	198	926	.195
Punta Gorda	7,605	.3	158	1,196	.157
Rockledge	9,189	.4	42	2,162	.235
St. Augustine	5,400	.2	360	1,011	.187
St. Petersburg	79,203	3.3	910	15,425	.220
Sharpes	6,819	.3	34	1,547	.227
Summerfield	40,077	1.7	3,340	5,234	.131
Tampa	223,066	9.4	615	43,477	.185
Umatilla	157,671	6.7	9,275	16,509	.117
Waverly	1,242	.1	96	332	.267
Others	13,669	.6	44	3,206	.235
Total	1,416,879	59.9	225	\$262,824	\$0.185
<u>Georgia</u>					
Albany	3,008	.1	435	\$ 454	\$0.151
Atlanta	74,964	3.1	1,363	10,944	.146
Bowden	3,900	.2	300	986	.253
Brunswick	1,248	.1	139	255	.204

Table 82.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns	Average f.o.b. price per lb
Carrollton	1,440	.1	480	\$ 342	\$0.237
Cartersville	1,320	.1	440	267	.202
Cedartown	1,224	.0 ^a	306	259	.212
Cornelia	1,800	.1	360	505	.280
Eastman	49,884	2.1	767	14,702	.295
Griffin	1,440	.1	206	314	.218
Macon	3,108	.1	518	631	.203
Quitman	3,300	.1	660	869	.263
Rockmart	1,080	.0 ^a	540	306	.283
Rome	1,962	.1	1,962	255	.150
Savannah	2,040	.1	255	404	.198
Tallapoosa	1,560	.1	520	376	.241
Augusta	3,282	.1	106	838	.255
Others	9,771	.4	43	2,585	.265
Total	166,331	7.0	558	\$ 35,299	\$0.212
<u>Illinois</u>					
Chicago	1,365	.1	171	\$ 230	\$0.169
Others	384	.0 ^a	48	86	.224
Total	1,749	.1	109	\$ 316	\$0.181
<u>Indiana</u>					
Others	48	.0 ^a	24	\$ 14	\$0.283
Total	48	.0 ^a	24	\$ 14	\$0.283
<u>Kentucky</u>					
Others	197	.0 ^a	49	\$ 46	\$0.233
Total	197	.0 ^a	49	\$ 46	\$0.233

Table 82.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns	Average f.o.b.. price per lb
<u>Maryland</u>					
Hagerstown	1,272	.0 ^a	116	\$ 336	\$0.264
Others	1,848	.1	264	507	.274
Total	3,120	.1	173	\$ 843	\$0.270
<u>Massachusetts</u>					
Others	485	.0 ^a	121	\$ 127	\$0.261
Total	485	.0 ^a	121	\$ 127	\$0.261
<u>Michigan</u>					
Others	70	.0 ^a	18	\$ 17	\$0.237
Total	70	.0 ^a	18	\$ 17	\$0.237
<u>Minnesota</u>					
Others	10	.0 ^a	5	\$ 3	\$0.264
Total	10	.0 ^a	5	\$ 3	\$0.264
<u>Mississippi</u>					
Others	966	.0 ^a	44	\$ 233	\$0.242
Total	966	.0 ^a	44	\$ 233	\$0.242
<u>Missouri</u>					
Others	320	.0 ^a	40	\$ 78	\$0.243
Total	320	.0 ^a	40	\$ 78	\$0.243

Table 82.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns	Average f.o.b. price per lb
<u>Nebraska</u>					
Others	168	.0 ^a	84 \$	39	\$0.233
Total	168	.0 ^a	84 \$	39	\$0.233
<u>New Hampshire</u>					
Others	25	.0 ^a	25 \$	7	\$0.280
Total	25	.0 ^a	25 \$	7	\$0.280
<u>New Jersey</u>					
Others	1,491	.1	99 \$	345	\$0.232
Total	1,491	.1	99 \$	345	\$0.232
<u>New York</u>					
Buffalo	13,532	.6	301 \$	3,159	\$0.233
New York City	381,506	16.1	5,450	58,326	.153
Syracuse	122,075	5.2	24,415	17,627	.144
Others	2,182	.1	90	489	.226
Total	519,295	22.0	3,606 \$	79,601	\$0.153
<u>North Carolina</u>					
Charlotte	8,667	.3	510 \$	1,231	\$0.142
Greensboro	6,774	.3	521	1,054	.156
Leaksville	1,032	.0 ^a	172	275	.267
Raleigh	4,020	.2	212	723	.180
Rocky Mount	1,320	.1	264	250	.189
Salisbury	3,900	.2	177	951	.244
Shelby	18,501	.8	2,315	2,784	.150
Winston-Salem	2,080	.1	189	484	.233
Zebulon	1,800	.1	300	373	.207

Table 82.--Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns	Average f.o.b. price per lb
Greenville	1,915	.1	479	\$ 265	\$0.138
Others	5,767	.2	134	1,410	.244
Total	55,776	2.4	362	\$ 9,800	\$0.176
<u>North Dakota</u>					
Others	10	.0 ^a	10	\$ 2	\$0.198
Total	10	.0 ^a	10	\$ 2	\$0.198
<u>Ohio</u>					
Cincinnati	25,603	1.1	25,603	\$ 3,112	\$0.122
Cleveland	3,291	.1	206	974	.296
Others	544	.0 ^a	26	154	.279
Total	29,438	1.2	775	\$ 4,240	\$0.144
<u>Oklahoma</u>					
Others	60	.0 ^a	60	No charge	---
Total	60	.0 ^a	60	No charge	---
<u>Pennsylvania</u>					
Lancaster	4,614	.2	1,154	\$ 759	\$0.165
Philadelphia	4,137	.2	138	1,027	.248
Others	2,100	.1	300	451	.215
Total	10,851	.5	265	\$ 2,237	\$0.206

Table 82.-- Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns	Average f.o.b. price per lb
<u>Rhode Island</u>					
Others	10	.0 ^a	10 \$	3	\$0.264
Total	10	.0 ^a	10 \$	3	\$0.264
<u>South Carolina</u>					
Allendale	2,700	.1	225 \$	725	\$0.269
Charleston	1,512	.1	216	305	.201
Columbia	5,882	.2	392	956	.163
Greenville	18,575	.8	1,160	5,051	.279
Orangeburg	3,995	.2	174	768	.192
Sumter	1,443	.1	289	321	.222
Walterboro	1,236	.1	137	251	.203
Others	3,144	.1	165	873	.278
Total	38,487	1.7	363 \$	9,250	\$0.240
<u>Tennessee</u>					
Knoxville	15,150	.6	947 \$	2,532	\$0.167
Morristown	2,100	.1	700	494	.235
Others	2,306	.1	105	468	.203
Total	19,556	.8	477 \$	3,494	\$0.179
<u>Texas</u>					
Houston	59,085	2.5	29,543 \$	8,009	\$0.136
Total	59,085	2.5	29,543 \$	8,009	\$0.136

Table 82.-- Continued

Market areas	Volume (lbs)	Per cent of total volume	Average volume per lot (lbs)	Total f.o.b. returns	Average f.o.b. price per lb
<u>Virginia</u>					
Charlottesville	1,990	.1	663 \$	268	\$0.135
Hampton	1,014	.0 ^a	63	244	.241
Martinsville	1,380	.1	276	381	.276
Others	1,974	.1	73	581	.284
Total	6,358	.3	125 \$	1,454	\$0.229
<u>West Virginia</u>					
Others	600	.0 ^a	300 \$	98	\$0.163
Total	600	.0 ^a	300 \$	98	\$0.163
<u>Wisconsin</u>					
Others	29	.0 ^a	15 \$	8	\$0.271
Total	29	.0 ^a	15 \$	8	\$0.271
<u>Canada</u>					
Toronto	3,420	.1	285 \$	991	\$0.290
Total	3,420	.1	285 \$	991	\$0.290
<u>Germany</u>					
Hamburg	16,364	.7	16,364 \$	2,198	\$0.134
Total	16,364	.7	16,364 \$	2,198	\$0.134
Grand total	2,364,854	100.0	321	\$425,236	\$0.180

^aLess than 0.05 per cent.

Table 83.--All varieties of honey, 1955--comparison of average net returns per pound for important consumer-size packs sold in selected cities by 9 packers

Cities	Type of pack and variety of honey					
	24/8-oz Q, OB		24/1-lb FB, OB		12/1-lb Sv, OB	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	\$0.081	----	\$0.115	----
Avon Park, Fla.	\$0.143	----	.087	----	.162	----
Bayard, Fla.	----	----	.135	----	.122	----
Clearwater, Fla.	----	\$0.126	----	\$0.135	----	\$-0.073
Cocoa, Fla.	----	----	.119	----	.197	----
Daytona & Beach, Fla.	----	.108	.073	.105	----	----
Deland, Fla.	----	.102	----	.127	----	----
Edgewater, Fla.	----	----	----	----	----	----
Ft. Myers, Fla.	----	----	----	----	----	----
Haines City, Fla.	.141	----	.102	----	.226	----
Jacksonville, Fla.	----	----	----	----	----	----
Lakeland, Fla.	.119	----	----	----	----	----
Lake Wales, Fla.	.140	----	.094	----	.158	----
Leesburg, Fla.	.151	.087	.089	.071	.157	----
Miami, Fla.	.096	.104	.106	----	.108	----
Minneola, Fla.	----	.065	----	.149	----	-.120
New Smyrna Beach, Fla.	----	----	.100	----	.189	----
Ocala, Fla.	.138	----	.077	----	.157	----
Orlando, Fla.	.118	----	.101	----	.253	----
Pensacola, Fla.	.125	----	.075	----	.110	----
Rockledge, Fla.	----	----	.117	----	----	----
St. Petersburg, Fla.	.107	----	----	----	.123	----
Sharpes, Fla.	----	----	.126	----	.211	----
Tampa, Fla.	.104	.098	----	----	.153	----
Atlanta, Ga.	.116	----	----	----	.129	----
Augusta, Ga.	.102	----	----	----	.119	----
Bowden, Ga.	----	----	.081	----	----	----
Eastman, Ga.	----	----	.091	----	.098	----
Quitman, Ga.	----	----	----	----	.108	----
Buffalo, N. Y.	.130	----	----	----	----	----
New York City, N. Y.	----	----	.085	----	----	----
Winston-Salem, N. C.	----	----	----	----	----	----
Philadelphia, Pa.	----	----	----	----	----	----
Greenville, S. C.	----	----	----	----	.100	----
Orangeburg, S. C.	.097	----	----	----	.110	----
Spartenburg, S. C.	----	----	.079	----	.108	----
Knoxville, Tenn.	----	----	----	----	----	----
Richmond, Va.	----	----	.098	----	.157	----

Table 83.--Continued

Cities	Type of pack and variety of honey					
	24/2 $\frac{1}{2}$ -1b Tin, OB		6/5-1b RJ, OB		24/2-1b Q, OBC	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	----	----	\$0.147	----
Avon Park, Fla.	----	----	----	----	.178	----
Bayard, Fla.	\$0.151	----	----	----	----	----
Clearwater, Fla.	----	----	----	----	----	----
Cocoa, Fla.	.149	----	----	----	----	----
Daytona & Beach, Fla.	.128	----	----	----	----	\$0.126
Deland, Fla.	----	----	----	----	----	.141
Edgewater, Fla.	----	----	----	----	----	----
Ft. Myers, Fla.	----	----	----	----	----	----
Haines City, Fla.	----	----	----	----	.162	----
Jacksonville, Fla.	----	----	\$0.150	----	----	----
Lakeland, Fla.	.115	----	----	----	.160	----
Lake Wales, Fla.	----	----	----	----	.178	----
Leesburg, Fla.	.107	----	.165	\$0.102	----	----
Miami Fla.	.162	----	----	----	.158	----
Minneola, Fla.	----	----	----	.117	----	----
New Smyrna Beach, Fla.	.126	----	----	----	----	----
Ocala, Fla.	.106	----	.176	----	----	----
Orlando, Fla.	.134	----	----	----	----	----
Pensacola, Fla.	----	----	----	----	----	----
Rockledge, Fla.	.138	----	----	----	----	----
St. Petersburg, Fla.	----	----	.177	----	----	----
Sharps, Fla.	.144	----	----	----	----	----
Tampa, Fla.	----	----	----	----	.154	----
Atlanta, Ga.	----	----	.147	----	.152	----
Augusta, Ga.	----	----	----	----	----	----
Bowden, Ga.	----	----	----	----	.147	----
Eastman, Ga.	.142	----	.144	----	----	----
Quitman, Ga.	----	----	.140	----	----	----
Buffalo, N. Y.	----	----	----	----	----	----
New York City, N. Y.	----	----	----	----	.157	----
Winston-Salem, N. C.	----	----	----	----	----	----
Philadelphia, Pa.	----	----	.142	----	----	----
Greenville, S. C.	----	----	----	----	----	----
Orangeburg, S. C.	----	----	----	----	----	----
Spartenburg, S. C.	----	----	----	----	----	----
Knoxville, Tenn.	----	----	----	----	----	----
Richmond, Va.	----	----	----	----	.075	----

Table 83.--Continued

Cities	Type of pack and variety of honey					
	24/1-1b FB, OBC		24/1-1b Tumb, OBC		12/2-1b Q, OBC	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	\$0.141	----	----	----	\$0.150	----
Avon Park, Fla.	.165	----	----	----	.167	----
Bayard, Fla.	.187	----	----	----	----	----
Clearwater, Fla.	----	----	----	\$-0.045	----	\$0.006
Cocoa, Fla.	.204	----	----	----	.223	----
Daytona & Beach, Fla.	.182	\$0.105	----	----	----	----
Deland, Fla.	----	.116	----	----	----	----
Edgewater, Fla.	.155	----	----	----	----	----
Ft. Myers, Fla.	----	----	----	----	----	----
Haines City, Fla.	.167	----	----	----	----	----
Jacksonville, Fla.	.182	----	.148	----	----	----
Lakeland, Fla.	----	----	----	----	----	----
Lake Wales, Fla.	.157	----	----	----	----	----
Leesburg, Fla.	.155	.086	----	-.107	----	----
Miami, Fla.	.156	----	.127	----	.153	----
Minneola, Fla.	----	----	----	-.074	----	----
New Smyrna Beach, Fla.	----	----	----	----	----	----
Ocala, Fla.	.157	----	.156	----	----	----
Orlando, Fla.	.161	----	----	----	----	----
Pensacola, Fla.	.135	----	----	----	.136	----
Rockledge, Fla.	.189	----	----	----	----	----
St. Petersburg, Fla.	----	----	----	----	----	----
Sharpes, Fla.	.201	----	----	----	----	----
Tampa, Fla.	.158	----	.148	----	----	----
Atlanta, Ga.	----	----	----	----	.155	----
Augusta, Ga.	----	----	.137	----	.167	----
Bowden, Ga.	----	----	----	----	.153	----
Eastman, Ga.	.170	----	----	----	----	----
Quitman, Ga.	----	----	----	----	----	----
Buffalo, N. Y.	----	----	.147	----	----	----
New York City, N. Y.	.158	----	.132	-.059	.159	----
Winston-Salem, N. C.	----	----	.130	----	.153	----
Philadelphia, Pa.	.154	----	.139	----	----	----
Greenville, S. C.	----	----	.117	----	----	----
Orangeburg, S. C.	----	----	.129	----	----	----
Spartenburg, S. C.	.133	----	.141	----	----	----
Knoxville, Tenn.	----	----	.142	----	----	----
Richmond, Va.	.166	----	----	----	.148	----

Table 83.--Continued

Cities	Type of pack and variety of honey					
	12/2 $\frac{1}{2}$ -lb Sq, OBC		24/8-oz Q, LA		24/1-lb Q, LA	
	Fill.	Unfil.	Fill.	Unfil.	Fill.	Unfil.
Birmingham, Ala.	----	----	----	----	----	----
Avon Park, Fla.	\$0.153	----	----	----	----	----
Bayard, Gla.	----	----	----	----	----	----
Clearwater, Fla.	----	\$0.080	----	----	----	----
Cocoa, Fla.	.223	----	----	----	----	----
Daytona & Beach, Fla.	----	.075	----	----	----	\$0.083
Deland, Fla.	----	.090	----	----	----	.105
Edgewater, Fla.	----	----	----	----	----	----
Ft. Myers, Fla.	----	.117	----	----	----	.131
Haines City, Fla.	----	----	----	----	----	----
Jacksonville, Fla.	----	----	\$0.093	----	\$0.096	----
Lakeland, Fla.	----	----	----	\$0.106	----	.117
Lake Wales, Fla.	.152	----	----	.151	----	.155
Leesburg, Fla.	----	.056	----	----	----	----
Miami, Fla.	----	----	.115	.085	.101	.096
Minneola, Fla.	----	.089	----	----	----	----
New Smyrna, Beach, Fla.	.193	----	----	----	----	----
Ocala, Fla.	----	----	----	----	.153	----
Orlando, Fla.	----	----	----	----	----	----
Pensacola, Fla.	----	----	----	----	----	----
Rockledge, Fla.	----	----	----	----	----	----
St. Petersburg, Fla.	----	----	.130	----	.145	----
Sharpes, Fla.	----	----	----	----	----	----
Tamps, Fla.	----	----	.092	.085	.114	.103
Atlanta, Ga.	----	----	----	----	.107	----
Augusta, Ga.	----	----	.087	----	.101	----
Bowden, Ga.	----	----	----	----	----	----
Eastman, Ga.	----	----	----	----	----	----
Quitman, Ga.	----	----	----	----	----	----
Buffalo, N. Y.	----	----	----	----	----	----
New York City, N. Y.	----	.068	----	----	----	----
Winston-Salem, N. C.	----	----	----	----	.128	----
Philadelphia, Pa.	----	----	----	----	----	----
Greenville, S. C.	----	----	----	----	----	----
Orangeburg, S. C.	----	----	----	----	.094	----
Spartenburg, S. C.	----	----	----	----	----	----
Knoxville, Tenn.	----	----	----	----	----	----
Richmond, Va.	----	----	----	----	----	----

Table 83.--Continued

Cities	Type of pack and variety of honey			
	6/5-1b RJ, LA		12/5-1b Tm, LA	
	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	----	----
Avon Park, Fla.	----	----	----	----
Bayard, Fla.	----	----	----	----
Clearwater, Fla.	----	----	----	\$0.219
Cocoa, Fla.	----	----	\$0.094	----
Daytona & Beach, Fla.	----	----	.067	.067
Deland, Fla.	----	----	----	.080
Edgewater, Fla.	----	----	----	----
Ft. Myers, Fla.	----	----	----	.089
Haines City, Fla.	----	----	----	----
Jacksonville, Fla.	\$0.128	----	.106	----
Lakeland, Fla.	----	----	----	.082
Lake Wales, Fla.	----	----	----	----
Leesburg, Fla.	----	----	.059	----
Miami, Fla.	----	----	.096	.094
Minneola, Fla.	----	----	----	----
New Smyrna Beach, Fla.	----	----	.076	----
Ocala, Fla.	----	----	.070	----
Orlando, Fla.	.142	----	.074	----
Pensacola, Fla.	----	----	----	----
Rockledge, Fla.	----	----	----	----
St. Petersburg, Fla.	.158	----	----	----
Sharpes, Fla.	----	----	.096	----
Tampa, Fla.	.159	----	----	.086
Atlanta, Ga.	.124	----	----	----
Augusta, Ga.	.115	----	----	----
Bowden, Ga.	----	----	----	----
Eastman, Ga.	----	----	----	----
Quitman, Ga.	----	----	----	----
Buffalo, N. Y.	----	----	----	----
New York City, N. Y.	----	----	----	----
Winston-Salem, N. C.	----	----	----	----
Philadelphia, Pa.	----	----	----	----
Greenville, S. C.	----	----	----	----
Orangeburg, S. C.	----	----	----	----
Spartenburg, S. C.	----	----	----	----
Knoxville, Tenn.	.122	----	.121	----
Richmond, Va.	----	----	----	----

Table 83.--Continued

Cities	Type of pack and variety of honey			
	12/4 $\frac{1}{2}$ -lb Tin, A		12/5-lb Tin, A	
	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	----	----
Avon Park, Fla.	----	----	----	----
Bayard, Fla.	----	----	----	----
Clearwater, Fla.	----	----	----	----
Cocoa, Fla.	----	----	\$0.092	----
Daytona & Beach, Fla.	----	----	----	----
Deland, Fla.	----	----	----	----
Edgewater, Fla.	----	----	----	----
Ft. Myers, Fla.	----	----	----	\$0.104
Haines City, Fla.	----	----	----	----
Jacksonville, Fla.	----	----	----	----
Lakeland, Fla.	----	----	----	.082
Lake Wales, Fla.	----	----	----	----
Leesburg, Fla.	----	----	----	----
Miami, Fla.	----	----	----	.090
Minneola, Fla.	----	----	----	----
New Smyrna Beach, Fla.	----	----	----	----
Ocala, Fla.	\$0.126	----	----	----
Orlando, Fla.	----	----	----	----
Pensacola, Fla.	----	----	----	----
Rockledge, Fla.	----	----	.101	----
St. Petersburg, Fla.	.144	----	----	----
Sharpes, Fla.	----	----	.094	----
Tampa, Fla.	.123	----	----	.086
Atlanta, Ga.	----	----	----	----
Augusta, Ga.	----	----	----	----
Bowden, Ga.	----	----	----	----
Eastman, Ga.	----	----	----	----
Quitman, Ga.	----	----	----	----
Buffalo, N. Y.	----	----	----	----
New York City, N. Y.	----	----	----	----
Winston-Salem, N. C.	----	----	----	----
Philadelphia, Pa.	----	----	----	----
Greenville, S. C.	----	----	----	----
Orangeburg, S. C.	----	----	----	----
Spartenburg, S. C.	----	----	----	----
Knoxville, Tenn.	----	----	----	----
Richmond, Va.	----	----	----	----

Table 84.--All varieties of honey, 1956--comparison of average net returns per pound for important consumer-size packs sold in selected cities by 9 packers

Cities	Type of pack and variety of honey					
	24/8-oz Q, OB		24/1-lb FB, OB		12/1-lb Sv, OB	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	\$0.100	----	\$0.125	----
Avon Park, Fla.	\$0.138	----	.113	----	.175	----
Bayard, Fla.	----	----	.112	----	.086	----
Clearwater, Fla.	----	\$0.067	----	----	----	----
Cocoa, Fla.	----	----	.133	----	----	----
Daytona & Beach, Fla.	----	.138	.063	\$0.093	----	----
Deland, Fla.	----	.104	----	.121	----	----
Edgewater, Fla.	----	----	----	----	----	----
Ft. Myers, Fla.	----	----	----	----	----	----
Haines City, Fla.	.139	----	.128	----	.161	----
Jacksonville, Fla.	----	----	----	----	----	----
Lakeland, Fla.	.117	----	.108	----	----	----
Lake Wales, Fla.	.132	----	.125	----	----	----
Leesburg, Fla.	----	.089	.099	----	.174	----
Miami, Fla.	.117	.106	.137	----	.121	----
Minneola, Fla.	----	.102	----	----	----	----
New Smyrna Beach, Fla.	----	----	.115	----	----	----
Ocala, Fla.	.119	----	.106	----	.155	----
Orlando, Fla.	----	----	.113	----	----	----
Pensacola, Fla.	.122	----	.107	----	.112	----
Rockledge, Fla.	----	----	.123	----	.209	----
St. Petersburg, Fla.	----	.078	----	.113	----	\$-0.028
Sharps, Fla.	----	----	.129	----	.208	----
Tampa, Fla.	.110	.101	.088	----	----	----
Atlanta, Ga.	.119	----	.108	----	.141	----
Augusta, Ga.	.103	----	----	----	.113	----
Bowden, Ga.	----	----	.106	----	----	----
Eastman, Ga.	----	----	.095	----	.154	----
Quitman, Ga.	----	----	----	----	.128	----
Buffalo, N. Y.	.118	----	.124	----	----	----
New York City, N. Y.	----	----	.114	----	.148	----
Winston-Salem, N. C.	----	----	----	----	.123	----
Philadelphia, Pa.	----	----	----	----	----	----
Greenville, S. C.	----	----	----	----	.118	----
Orangeburg, S. C.	.091	----	----	----	.088	----
Spartanburg, S. C.	----	----	.096	----	.123	----
Knoxville, Tenn.	----	----	----	----	----	----
Richmond, Va.	----	----	.100	----	.143	----

Table 84.--Continued

Cities	Type of pack and variety of honey					
	24/2 $\frac{1}{2}$ -Tin, OB		6/5-1b RJ, OB		24/1-1b Q, OBC	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	----	----	----	----
Avon Park, Fla.	----	----	----	----	----	----
Bayard, Fla.	\$0.147	----	----	----	----	----
Clearwater, Fla.	----	----	----	----	----	----
Cocoa, Fla.	.164	----	----	----	----	----
Daytona & Beach, Fla.	.126	\$0.124	----	----	----	\$0.164
Deland, Fla.	----	.109	----	----	----	.146
Edgewater, Fla.	----	----	----	----	----	----
Ft. Myers, Fla.	----	----	----	----	----	----
Haines City, Fla.	----	----	----	----	\$0.187	----
Jacksonville, Fla.	----	----	\$0.161	----	----	----
Lakeland, Fla.	.137	----	----	----	.184	----
Lake Wales, Fla.	----	----	----	----	.206	----
Leesburg, Fla.	.133	----	----	\$0.108	----	----
Miami, Fla.	.185	----	----	----	----	----
Minneola, Fla.	----	----	----	.133	----	----
New Smyrna Beach, Fla.	.150	----	----	----	----	----
Ocala, Fla.	.129	----	.166	----	----	----
Orlando, Fla.	.144	----	----	----	----	----
Pensacola, Fla.	----	----	----	----	.188	----
Rockledge, Fla.	.148	----	----	----	----	----
St. Petersburg, Fla.	----	----	.164	----	.203	----
Sharps, Fla.	.155	----	----	----	----	----
Tampa, Fla.	----	----	.161	----	.187	----
Atlanta, Ga.	----	----	.164	----	.186	----
Augusta, Ga.	----	----	----	----	----	----
Bowden, Ga.	----	----	----	----	----	----
Eastman, Ga.	.162	----	----	----	----	----
Quitman, Ga.	----	----	.159	----	----	----
Buffalo, N. Y.	----	----	.169	----	----	----
New York City, N. Y.	.261	----	----	----	----	----
Winston-Salem, N. C.	----	----	----	----	----	----
Philadelphia, Pa.	----	----	.157	----	----	----
Greenville, S. C.	----	----	----	----	----	----
Orangeburg, S. C.	----	----	----	----	----	----
Spartenburg, S. C.	----	----	----	----	----	----
Knoxville, Tenn.	----	----	.146	----	----	----
Richmond, Va.	----	----	----	----	.173	----

Table 84.--Continued

Cities	Type of pack and variety of honey					
	24/1-1b FB, OBC		24/1-1b Tumb, OBC		12/2-1b Q, OBC	
	Fil.	Unfil.	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	\$0.160	----	----	----	\$0.190	----
Avon Park, Fla.	.171	----	----	----	.194	----
Bayard, Fla.	.149	----	----	----	----	----
Clearwater, Fla.	----	----	----	\$0.084	----	----
Cocoa, Fla.	.192	----	----	----	.233	----
Daytona & Beach, Fla.	.161	----	----	----	.217	----
Deland, Fla.	----	----	----	----	----	----
Edgewater, Fla.	.158	----	\$0.121	----	.181	----
Ft. Myers, Fla.	----	----	----	----	----	----
Haines City, Fla.	.178	----	----	----	.187	----
Jacksonville, Fla.	----	----	.126	----	.180	----
Lakeland, Fla.	----	----	----	----	.177	----
Lake Wales, Fla.	----	----	----	----	.189	----
Leesburg, Fla.	.165	----	.139	.090	.195	----
Miami, Fla.	.160	----	.114	----	.183	----
Minneola, Fla.	----	----	----	.098	----	----
New Smyrna Beach, Fla.	.160	----	----	----	.207	----
Ocala, Fla.	.170	----	----	----	.174	----
Orlando, Fla.	.181	----	----	----	----	----
Pensacola, Fla.	----	----	----	----	.189	----
Rockledge, Fla.	.189	----	----	----	.221	----
St. Petersburg, Fla.	----	----	----	.085	.204	----
Sharps, Fla.	.189	----	----	----	.228	----
Tampa, Fla.	----	----	.126	----	----	----
Atlanta, Ga.	.159	----	----	----	.197	----
Augusta, Ga.	----	----	.115	----	.164	----
Bowden, Ga.	.157	----	----	----	.189	----
Eastman, Ga.	.157	----	----	----	----	----
Quitman, Ga.	----	----	----	----	----	----
Buffalo, N. Y.	----	----	.126	----	----	----
New York City, N. Y.	.163	----	.123	.095	.195	----
Winston-Salem, N. C.	----	----	----	----	----	----
Philadelphia, Pa.	----	----	.117	----	----	----
Greenville, S. C.	----	----	----	----	----	----
Orangeburg, S. C.	----	----	.074	----	----	----
Spartenburg, S. C.	----	----	----	----	.176	----
Knoxville, Tenn.	----	----	----	----	----	----
Richmond, Va.	.144	----	----	----	.179	----

Table 84.--Continued

Cities	Type of pack and variety of honey					
	12/2 $\frac{1}{2}$ -lb Sq, OBC		24/8-oz Q, LA		24/1-lb Q, LA	
	Fill.	Unfil.	Fill.	Unfil.	Fill.	Unfil.
Birmingham, Ala.	\$0.088	----	----	----	\$0.170	----
Avon Park, Fla.	.104	----	----	----	----	----
Bayard, Fla.	.164	----	----	----	----	----
Clearwater, Fla.	----	\$0.116	----	----	----	----
Cocoa, Fla.	.182	----	----	----	----	----
Daytona & Beach, Fla.	.157	.055	----	----	----	\$0.073
Deland, Fla.	----	.120	----	----	----	.095
Edgewater, Fla.	.129	----	----	----	----	----
Ft. Myers, Fla.	----	----	----	----	----	----
Haines City, Fla.	.117	----	----	----	----	----
Jacksonville, Fla.	.130	----	\$0.098	----	.114	----
Lakeland, Fla.	.136	----	----	----	----	----
Lake Wales, Fla.	----	----	----	\$0.158	----	.163
Leesburg, Fla.	.153	.150	----	----	----	----
Miami, Fla.	.141	----	.110	.086	.103	.098
Minneola, Fla.	----	.152	----	----	----	.109
New Smyrna Beach, Fla.	.162	----	----	----	----	----
Ocala, Fla.	.147	----	.102	----	.129	----
Orlando, Fla.	.150	----	.090	----	.114	----
Pensacola, Fla.	----	----	----	----	----	----
Rockledge, Fla.	.172	----	----	----	----	----
St. Petersburg, Fla.	----	.125	----	----	----	----
Sharpes, Fla.	.181	----	----	----	----	----
Tampa, Fla.	----	----	.100	.091	.124	.106
Atlanta, Ga.	.089	----	----	----	.109	----
Augusta, Ga.	.114	----	.081	----	.119	----
Bowden, Ga.	.150	----	----	----	----	----
Eastman, Ga.	----	----	----	----	----	----
Quitman, Ga.	----	----	----	----	----	----
Buffalo, N. Y.	----	----	----	----	----	----
New York City, N. Y.	.111	.142	----	----	----	.104
Winston-Salem, N. C.	----	----	----	----	----	----
Philadelphia, Pa.	.153	----	----	----	----	----
Greenville, S. C.	.107	----	----	----	----	----
Orangeburg, S. C.	----	----	----	----	.132	----
Spartenburg, S. C.	----	----	----	----	----	----
Knoxville, Tenn.	.121	----	----	----	----	----
Richmond, Va.	.111	----	----	----	----	----

Table 84.--Continued

Cities	Type of pack and variety of honey			
	6/5-1b RJ, LA		12/5-1b Tin, LA	
	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	----	----
Avon Park, Fla.	----	----	----	----
Bayard, Fla.	----	----	----	----
Clearwater, Fla.	----	----	----	----
Cocoa, Fla.	----	----	\$0.103	----
Daytona & Beach, Fla.	----	----	.088	\$0.077
Deland, Fla.	----	----	----	.097
Edgewater, Fla.	----	----	----	----
Ft. Myers, Fla.	----	----	----	----
Haines City, Fla.	----	----	----	----
Jacksonville, Fla.	\$0.146	----	.135	----
Lakeland, Fla.	----	----	----	----
Lake Wales, Fla.	----	----	----	----
Leesburg, Fla.	----	----	.084	----
Miami, Fla.	----	----	.097	----
Minneola, Fla.	----	----	----	----
New Smyrna Beach, Fla.	----	----	.087	----
Ocala, Fla.	----	----	.086	----
Orlando, Fla.	.141	----	----	----
Pensacola, Fla.	----	----	----	----
Rockledge, Fla.	----	----	.100	----
St. Petersburg, Fla.	----	----	----	----
Sharpes, Fla.	----	----	.110	----
Tampa, Fla.	.153	----	.137	----
Atlanta, Ga.	.132	----	----	----
Augusta, Ga.	.140	----	----	----
Bowden, Ga.	----	----	----	----
Eastman, Ga.	----	----	----	----
Quitman, Ga.	----	----	----	----
Buffalo, N. Y.	----	----	----	----
New York City, N. Y.	----	----	----	----
Winston-Salem, N. C.	----	----	----	----
Philadelphia, Pa.	----	----	----	----
Greenville, S. C.	----	----	----	----
Orangeburg, S. C.	----	----	----	----
Spartenburg, S. C.	----	----	----	----
Knoxville, Tenn.	.123	----	.120	----
Richmond, Va.	----	----	----	----

Table 84.-- Continued

Cities	Type of pack and variety of honey			
	12/4 $\frac{1}{2}$ -1b LTin, A		12/5-1b Tin, A	
	Fil.	Unfil.	Fil.	Unfil.
Birmingham, Ala.	----	----	----	----
Avon Park, Fla.	----	----	----	----
Bayard, Fla.	----	----	----	----
Clearwater, Fla.	----	----	----	----
Cocoa, Fla.	----	----	----	----
Daytona & Beach, Fla.	----	----	----	----
Deland, Fla.	----	----	----	----
Edgewater, Fla.	----	----	----	----
Ft. Myers, Fla.	----	----	----	----
Haines City, Fla.	----	----	----	----
Jacksonville, F.a	----	----	----	----
Lakeland, Fla.	----	----	----	\$0.101
Lake Wales, Fla.	----	----	----	----
Leesburg, Fla.	----	----	----	----
Miami, Fla.	----	----	----	.102
Minneola, Fla.	----	----	----	----
New Smyrna Beach, Fla.	----	----	----	----
Ocala, Fla.	\$0.128	----	----	----
Orlando, Fla.	----	----	----	----
Pensacola, Fla.	----	----	----	----
Rockledge, Fla.	----	----	----	----
St. Petersburg, Fla.	----	----	----	----
Sharpes, Fla.	----	----	----	----
Tampa, Fla.	.111	----	----	.105
Atlanta, Ga.	----	----	----	----
Augusta, Ga.	----	----	----	----
Bowden, Ga.	----	----	----	----
Eastman, Ga.	----	----	----	----
Quitman, Ga.	----	----	----	----
Buffalo, N. Y.	----	----	----	----
New York City, N. Y.	----	----	----	----
Winston-Salem, N. C.	----	----	----	----
Philadelphia, Pa.	----	----	----	----
Greenville, S. C.	----	----	----	----
Orangeburg, S. C.	----	----	----	----
Spartenburg, S. C.	----	----	----	----
Knoxville, Tenn.	----	----	----	----
Richmond, Va.	----	----	----	----

Table 85.--All honey, 1955 and 1956, in bulk sizes, filtered and unfiltered combined--seasonal distribution of volumes sold in Florida, average f.o.b. prices received per pound, and index of prices received by 9 packers

Period	Volume (lbs)	Per cent of total volume	Total f.o.b. return	Average f.o.b. price per lb	Index of f.o.b. price received ^a
<u>1955</u>					
January	22,581	5.8	\$ 2,475	\$0.109	88
February	17,145	4.4	1,937	.113	91
March	37,038	9.5	4,264	.115	93
April	40,521	10.4	4,608	.114	92
May	32,893	8.4	3,704	.113	91
June	37,965	9.7	4,492	.118	95
July	16,084	4.1	1,837	.114	92
August	18,614	4.8	2,057	.111	90
September	14,505	3.7	1,722	.119	96
October	44,955	11.5	5,835	.130	105
November	69,497	17.8	8,114	.117	94
December	38,784	9.9	4,990	.129	104
Total	390,582	100.0	\$46,033	\$0.118	95
<u>1956</u>					
January	22,439	5.2	\$ 2,775	\$0.124	100
February	15,484	3.6	1,975	.128	103
March	22,809	5.3	3,029	.133	107
April	31,360	7.2	4,046	.129	104
May	32,932	7.6	4,235	.129	104
June	25,966	6.0	3,476	.134	108
July	55,264	12.8	7,681	.139	112
August	33,054	7.6	4,288	.130	105
September	53,364	12.3	6,830	.128	103
October	53,552	12.4	6,661	.124	100
November	58,044	13.4	7,069	.123	99
December	28,745	6.6	3,807	.132	106
Total	433,013	100.0	\$55,872	\$0.129	104
Grand total	823,595		\$101,905	\$0.124	100

^aAverage of 1955 and 1956 f.o.b. price received per pound is base of index.

Table 86.--All honey, 1955 and 1956, in bulk sizes, filtered and unfiltered combined--seasonal distribution of volumes sold in the U. S., average f.o.b. prices received per pound, and index of prices received by 9 packers

Period	Volume (lbs)	Per cent of total volume	Total f.o.b. return	Average f.o.b. price per lb	Index of f.o.b. price received ^a
<u>1955</u>					
January	30,844	2.5	\$ 3,473	\$0.113	86
February	94,297	7.6	12,125	.129	98
March	81,458	6.5	9,532	.117	89
April	200,763	16.1	25,844	.129	98
May	173,238	13.9	22,108	.128	98
June	107,719	8.6	13,499	.125	95
July	53,758	4.3	6,481	.121	92
August	59,705	4.8	7,178	.120	92
September	62,795	5.0	7,736	.123	94
October	250,007	20.1	32,138	.129	98
November	92,260	7.4	11,170	.121	92
December	39,984	3.2	5,192	.130	99
Total	1,246,828	100.0	\$156,475	\$0.125	95
<u>1956</u>					
January	25,282	2.2	\$ 3,217	\$0.127	97
February	22,066	1.9	2,894	.131	100
March	34,875	3.0	4,769	.137	105
April	42,576	3.7	5,634	.132	101
May	41,584	3.6	5,490	.132	101
June	96,451	8.4	13,110	.136	104
July	193,244	16.8	28,129	.146	111
August	120,719	10.5	17,361	.144	110
September	214,859	18.7	29,113	.135	103
October	129,836	11.3	17,898	.138	105
November	142,112	12.4	19,089	.134	102
December	86,906	7.5	11,719	.135	103
Total	1,150,510	100.0	\$158,423	\$0.138	105
Grand total	2,397,338		\$314,898	\$0.131	100

^aAverage of 1955 and 1956 f.o.b. price received per pound is base of index.

Table 87.--All filtered honey, 1956--percentages of total volume sold, by types of buyer and method of transportation used, 9 packers

Carriers	Buyers					
	Whole-sellers	Chains	Co-ops	Gift stands	Independents	Honey packers
						Bakers
						Others
						All
<u>Consumer sizes</u>						
Packer	4.5	7.9	---	12.8	2.2	---
Truckline	12.1	4.8	0.2	5.6	.9	---
Rail freight	.6	---	---	---	---	a
Express	---	---	---	---	---	a
Parcel post	---	---	---	a	---	a
Truck collect	.9	---	a	.2	.1	0.1
Freight collect	.1	---	---	---	a	1.3
Express collect	---	---	---	a	---	---
Purchaser	1.1	29.7	.3	2.5	.4	a
Boat	---	---	---	---	---	0.8
Total	19.3	42.4	0.5	21.1	3.6	0.8
						0.3
						89.0
<u>Bulk sizes</u>						
Packer	---	---	---	---	---	a
Truckline	0.3	---	---	---	---	4.2
Rail freight	.3	---	---	---	---	a
Truck collect	a	---	---	---	a	.1
Freight collect	---	---	---	---	0.1	---
Express collect	---	---	---	---	a	---
Purchaser	---	---	---	a	a	1.8
Boat	---	---	---	---	---	---
Total	0.6	---	---	a	0.1	2.4
						6.1
						1.8
						11.0
All sizes	19.9	42.4	0.5	21.1	3.7	3.4
						6.9
						2.1
						100.0

^aLess than 0.05 per cent.

Table 88.--All unfiltered honey, 1956--percentages of total volume sold, by types of buyer and method of transportation used, 9 packers

Carriers	Whole- salers	Chains	Co-ops	Gift stands	Buyers				Bakers	Others	All
					Inde- pendents	Consumer sizes					
Packer	1.2	7.5	---	4.3	5.1	---	---	---	0.1	18.2	
Truckline	.1	---	---	---	---	---	---	---	---	.1	
Rail freight	---	---	---	---	---	---	---	---	---	---	
Express	---	---	---	---	---	---	---	---	---	---	
Parcel post	---	---	---	---	---	---	---	---	a	a	
Truck collect	1.2	---	---	---	---	---	---	---	a	1.2	
Freight collect	---	---	---	---	---	---	---	---	---	---	
Express collect	---	---	---	---	---	---	---	---	---	---	
Purchaser	1.5	a	1.5	.5	---	---	---	---	a	3.5	
Boat	---	---	---	---	---	---	---	---	---	---	
Total	4.0	7.5	1.5	4.8	5.1	---	---	---	0.1	23.0	
<u>Bulk sizes</u>											
Packer	5.8	---	---	0.1	---	---	---	2.4	---	8.8	
Truckline	---	---	---	---	---	---	---	6.4	---	6.4	
Rail freight	---	---	---	---	---	---	---	---	---	---	
Truck collect	30.7	---	---	---	---	---	---	8.8	a	50.8	
Freight collect	---	---	---	---	---	---	---	---	---	---	
Express collect	---	---	---	---	---	---	---	---	a	a	
Purchaser	1.0	---	---	.2	---	---	---	9.6	.1	11.0	
Boat	---	---	---	---	---	---	---	---	---	---	
Total	37.5	---	---	0.3	---	---	---	27.8	11.3	0.1	77.0
All sizes	41.5	7.5	1.5	5.1	5.1	---	---	27.8	11.3	0.2	100.0

^aLess than 0.05 per cent.

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BIOGRAPHICAL SKETCH

Frederick Joseph Hoffer was born in Newark, New Jersey on July 28, 1911. He took undergraduate studies at Rutgers University in New Brunswick, New Jersey, and received a Bachelor of Science degree in Soils from the University of Florida in 1953. He received a Master of Agriculture degree in Soil Microbiology and Agricultural Economics from the University of Florida in 1955.

During World War II he served with the United States Air Force and for three years was in French Morocco, Algeria, Tunisia, and Italy. Until 1950, when he resumed academic studies, he was engaged in the life insurance business and held numerous assignments in that field in his native state. He held a Graduate Fellowship while working for his doctorate at the University of Florida.

Frederick Joseph Hoffer is married to the former Miss Billie Brantley of Milton, Santa Rosa County, Florida.

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This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of that committee. It was submitted to the Dean of the College of Agriculture and to the Graduate Council, and was approved as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

June 5, 1961.

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